TITLE 19. PUBLIC SAFETY DIVISION 2. OFFICE OF EMERGENCY SERVICES CHAPTER 2. EMERGENCIES AND MAJOR DISASTERS SUBCHAPTER 2. HAZARDOUS SUBSTANCES EMERGENCY RESPONSE TRAINING

§ 2510. Definitions.

- (a) "Haz Mat" stands for Hazardous Materials which means a substance which, by its nature, containment and reactivity, has the capability of inflicting harm during an accidental occurrence; characterized as being toxic, corrosive, flammable, reactive, an irritant or strong sensitizer and thereby posing a threat to health and the environment when improperly managed.
- (b) "Hazardous Chemicals" is a term used by the United States Occupational Safety and Health Administration (OSHA) to denote any chemical that would be a risk to employees if exposed in the workplace. The list of hazardous chemicals is found in OSHA title 29 CFR 1910.1000.
- (c) "Hazardous Substances," a term used by the California Occupational Safety and Health Administration's CA Code Regs. Title 8, Section 5192(a)(3)(A), encompasses every chemical regulated by both the Department of Transportation's "hazardous materials" (49 CFR 172.101 and appendices) and the Environmental Protection Agency's "hazardous waste" (40 CFR 261.33), including emergency response (29 CFR 1910.120).
- (d) "Hazardous Waste" materials are mixtures of waste which require special handling and disposal because of their potential to damage health and the environment.
- (e) "United Nations Hazard Classes" consist of eight classes of hazardous materials as categorized and defined by the Department of Transportation in Federal Register Volume 55, No. 246, Dec. 21, 1990, pages 52402-52729.
- (f) "First Responder Awareness Level" are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release.
- (g) "First Responder Operations Level" are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures.
- (h) "Department of Transportation" assures the coordinated, effective administration of the transportation programs of the Federal Government and develops national transportation policies and programs conducive to the provision of fast, safe, efficient and convenient transportation at the lowest cost consistent therewith.

- (i) "Material Safety Data Sheet" (MSDS), is a document which contains information regarding the specific identity of hazardous chemicals, including information on health effects, first aid, chemical and physical properties, and emergency phone numbers.
- (j) "Exposure" is the subjection of a person to a toxic substance or harmful physical agent through any route of entry.
- (k) "Hazardous Materials at the Technician Level" are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operational level in that they will approach the point of release in order to plug, patch, or otherwise stop the release of a hazardous substance.
- (1) "Hazardous Materials at the Specialist Level" are individuals who respond with, and provide support to, hazardous materials technicians. Their duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison to federal, state, local and other government authorities in regards to site activities.
- (m) "Protective Clothing or Personal Protective Equipment" (PPE), is the equipment provided to shield or isolate a person from the chemical, physical, and thermal hazards that may be encountered at a hazardous materials incident. Adequate personal protective equipment should protect the respiratory system, skin, eyes, face, hands, feet, head, body, and hearing. Personal protective equipment includes both personal protective clothing and self-contained positive-pressure breathing apparatus.
- (n) "Containment" includes all activities necessary to bring the incident to a point of stabilization and to establish a degree of safety for emergency personnel greater than that which existed upon arrival.
- (o) "Decontamination (Decon)" is the physical and/or chemical process of reducing and preventing the spread of contamination from persons and equipment used at a hazardous materials incident.
- (p) "Incident Commander" (IC), is the person responsible for all decisions relating to the management of the incident.
- (q) "Incident Command System" (ICS), is an organized system of roles, responsibilities, and standard operating procedures used to manage and direct emergency operations.
- (r) "BLEVE" stands for Boiling Liquid Expanding Vapor Explosion.
- (s) "Public Information Officer" (PIO), is the individual assigned to act as the liaison between the Incident Commander and the news media.

- (t) "Uniform Hazardous Waste Manifest" is the shipping document, originated and signed by the waste generator or an authorized representative, that contains the information required and must accompany shipments of hazardous waste.
- (u) "Level of Protective Clothing" includes positive-pressure breathing apparatus, designations of types of personal protective equipment to be worn based on NFPA standards: Level A includes vapor-protective suit for hazardous chemical emergencies, Level B includes liquid-splash protective suit for hazardous chemical emergencies, Level C includes limited-use protective suit for hazardous chemical emergencies.
- (v) "Safety Officer" is the person at a hazardous materials incident responsible for assuring that all operations performed at a hazardous materials incident, by all members present, are done with respect for the highest levels of safety. He/she has full authority to alter, suspend, or terminate any activity that may be judged to be unsafe, and reports to the Incident Commander.
- (w) "Executive Manager" means the chief executive officer, department head, or key management staff of an agency, organization, or jurisdiction, who has oversight responsibilities for hazardous materials incidents.
- (x) "Pre-Event Planning" is the process associated with preparing for the response to a hazard by developing plans, identifying resources, conducting exercises, and other techniques to improve an agency's or organization's response capabilities.
- (y) "Event-Specific Plan" is initially prepared at the first meeting of emergency personnel who have responded to an incident. The Event Specific Plan contains general control objectives reflecting overall incident strategy, and specific action plans.
- (z) "Mutual Aid" is an agreement to supply specifically agreed upon aid or support in an emergency situation between two or more agencies, jurisdictions, or political subdivisions.
- (aa) "Emergency Operations Center" (EOC), is the protected site where government officials exercise centralized direction and control in an emergency. Additionally, the EOC serves as a resource center and coordination point for additional field assistance. It also provides executive directives and acts as a liaison to the State and Federal Government, and, considers and mandates protective actions.
- (bb) "Investigations" The systematic search or inquiry into the particulars of an incident, and the collecting of the necessary evidence to seek criminal and/or civil prosecution.
- (cc) "Risk Management Protection Plan" has statutory requirements in Health and Safety Code, section 25534, subsection (1). A plan which encompasses, among other appropriate elements: structured assessment of hazards, formal personnel training program, procedures of periodic safety reviews of operating equipment and procedures,

schedules for testing the program, procedures for the purpose of reducing the probability of accidents.

- (dd) "Monitoring" to determine contamination levels and atmospheric conditions by observation and samples.
- (ee) "Monitoring Equipment" are instruments and devices used to identify, qualify, and/or quantify contaminants.
- (ff) "Environmental Monitoring" is the use of instruments and other techniques to determine the presence or levels of hazardous materials.
- (gg) "Field Training Program" refers to the California Hazardous Substances Incident Response Training and Education Program as defined in section 8574.20 of the California Government Code.
- (hh) "CSTI" refers to the "California Specialized Training Institute".
- (ii) "Authorized Representative". Any person, or group of people, authorized in writing by the Chief of the Hazardous Materials Section of CSTI to: conduct specific tasks related to the administration or delivery of training activities that are part of the California Hazardous Substances Incident Response Training and Education Program; conduct audits under the provisions of this program; or perform other specific tasks as directed by the Chief of the Hazardous Materials Section.
- (jj) "Course Manager". The individual California State Certified Hazardous Materials Instructor responsible for ensuring that a certified course meets the requirements of these regulations.
- (kk) "Instructor". An individual person who instructs a portion of a certified course, assists with an exercise in a certified course or performs other acts or tasks in support of the instruction of a certified class.
- (II) "Certified Class". A class that meets the requirements of the regulations regarding the California Hazardous Substances Incident Response Training and Education Program (Title 19, California Code of Regulations, Division 2, Chapter 1, Sub-Chapter 2, Sections 2510-2560).
- (mm) "EMT-P". A person certified as an Emergency Medical Technician at the Paramedic level as per standards set forth by the Emergency Medical Services Authority.
- (nn) "EMT-1". A person certified as an Emergency Medical Technician Level 1 by the Emergency Medical Services Authority.

HISTORY

- 1. New section filed 7-8-91; operative 8-7-91 (Register 91, No. 46).
- 2. Amendment filed 5-12-94; operative 6-13-94 (Register 94, No. 19).
- 3. Editorial correction of subsection (u) (Register 96, No. 52).
- 4. Amendment of subsections (p) and (v), new subsections (ii)-(nn), and repealer and new NOTE filed 12-23-96; operative 1-22-97 (Register 96, No. 52).
- 5. Amendment of subsection (g) filed 10-15-98; operative 11-14-98 (Register 98, No. 42).

§ 2520. Student Certification Curriculum.

- (a) Haz Mat Emergency Response First Responder Awareness Level.
- (1) Certified curriculum for First Responder Awareness Level shall include all of the following course objectives:
- (A) Student shall define the term "hazardous materials"; identify how hazardous materials can harm people, the environment and property; and state the role of the First Responder at the Awareness level as defined by Title 8 California Code of Regulations §5192(q)(6)(A).
- (B) Student shall recognize a Haz Mat incident through basic clues, warning signs, placards, labels, shipping papers, and material safety data sheets; identify, from a safe distance, the hazardous substance(s) present at the incident; understand the need for a positive safety attitude; and, describe a safe approach to a Haz Mat incident.
- (C) Student shall describe first responder awareness actions, understanding the need for responder safety, isolation of the incident scene, the need for additional resources and making required notifications.
- (D) Student shall identify the purpose and need to safely initiate command; cite basic identification and assessment techniques; demonstrate the use of the Department of Transportation North American Emergency Response Guidebook (current DOT NAERG) for basic action planning.
- (2) Certified curriculum for First Responder Awareness Level shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for First Responder Awareness Course shall be a minimum of 4 hours in length.
- (4) Certified curriculum for First Responder Awareness Course shall include the following training exercise:
- (A) Participation in a table-top exercise including successful completion of the following objectives:
- (i) Determine if a hazardous material exists and what notifications are necessary;
- (ii) Identify safety techniques, isolation methods, and agencies and resources needed;

- (iii) Conduct safe identification and assessment using the current NA ERG; and,
- (iv) Identify essential information to give to the Incident Commander.
- (5) Certified curriculum for First Responder Awareness Course shall include the following evaluation method:
- (A) Completion of a CSTI certified First Responder Awareness written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the First Responder Awareness Course shall include successful completion of a certified course as referenced in section 2520(a) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 4 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in section 2520 (a).
- (b) Haz Mat Emergency Response First Responder Operations Level.
- (1) Certified curriculum for First Responder Operations Level shall include all of the course objectives in Section 2520(a)(1) and all of the following course objectives:
- (A) Student shall state the role of the First Responder at the Operations level as defined by Title 8 California Code of Regulations §5192(q)(6)(B).
- (B) Student shall define basic terms used in emergency responses to releases of hazardous materials.
- (C) Student shall describe basic first responder operations initial actions.
- (D) Student shall explain the purpose, need and benefits, of scene management; describe the basic implementation of the Incident Command System (ICS) to manage a Haz Mat incident; and, demonstrate proper information flow from First Responder to Incident Commander at an incident command post.
- (E) Student shall describe identification and assessment techniques and demonstrate the use of the current Department of Transportation North American Emergency Response Guidebook for basic action planning.
- (F) Student shall explain the need for, types, selection criteria and limits of protective equipment commonly used in Haz Mat incidents.
- (G) Student shall describe the value, methods and limitations of stabilizing the Haz Mat incident through safe containment; and, describe the proper protective action and rescue options available to first responders, within their capabilities and resources.

- (H) Student shall identify the need for the appropriate decontamination of the victims, emergency response personnel and equipment, in order to avoid additional contamination; and, describe proper disposal and documentation procedures during a Haz Mat response.
- (I) Student shall identify the need and method to communicate and coordinate with typical agencies from all levels of government having authorized activities dealing with a Haz Mat event, citing those agencies, their roles/responsibilities and capabilities.
- (J) Student shall identify the local contingency plan to follow in his/her jurisdiction when dealing with a Haz Mat incident; and to describe the purpose, value, components, and limits of both pre-event and event-specific planning.
- (K) Student shall describe the health effects that Haz Mats present to the first responder's life safety.
- (L) Student shall describe a process for a safe and competent response to a Haz Mat incident, including explanation of the "risk vs. gain" concept.
- (M) Student shall demonstrate proper and safe first-responder actions in a simulated Haz Mat incident.
- (N) Student shall identify the legal role and rights of the media at a Haz Mat incident; describe the media capabilities that may aid in the incident response; and, cite basic Haz Mat legal aspects.
- (2) Certified Curriculum for First Responder Operations Level shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for First Responder Operations Course shall be a minimum of 16 hours in length if the class participants have not had First Responder Awareness training meeting the minimum competencies specified in Title 8, California Code of Regulations, Section 5192(q). If all of the class participants have had such training and present proof of that to the Course Manager then the minimum hours for a Certified Course may be 12 hours. A Certified Course 12 hours in length shall meet only the course objectives of this Section and may delete the course objectives in Section 2520(a)(1).
- (4) Certified curriculum for First Responder Operations Course shall include the following training exercises:
- (A) Demonstrate proper use of the current Department of Transportation North American Emergency Response Guide Book to include the following:
- (i) Given ten or more United Nations four digit numbers and or chemical names, participants will identify guide number including primary hazard, basic actions, and isolation and protective action distances as needed.

- (B) Participation in a simulated field Haz Mat exercise including successful completion of the following objectives:
- (i) Demonstrate proper safety, isolation and notifications for a simulated Haz Mat incident;
- (ii) Based on a simulated Haz Mat release, demonstrate the basic identification process using the current DOT guidebook;
- (iii) Based on an identification and hazard assessment process, identify the proper safe containment and protective action options; and,
- (iv) Identify essential information to be given by the First Responder to the Incident Commander.
- (5) Certified curriculum for First Responder Operations Course shall include the following evaluation method:
- (A) Completion of a CSTI certified First Responder Operations written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the First Responder Operations Course shall include successful completion of a certified course as referenced in section 2520(b) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 16 hours, except as noted in Paragraph (3) of this Section, accomplish all objectives, participate in training exercises and complete the evaluation method at the 70% standard as referenced in section 2520(b).
- (c) Haz Mat Emergency Response Incident Commander.
- (1) Certified curriculum for Incident Commander Level shall include all of the course objectives in Section 2520(a)(1), Section 2520(b)(1) and all of the following course objectives except as noted in paragraph (3) of this Section:
- (A) Student shall state the role of the Incident Commander (IC) as defined by applicable OSHA regulations.
- (B) Student shall demonstrate the ability to collect and interpret hazard and response information from sources such as printed reference material, computer databases and other technical resources.
- (C) Student shall demonstrate the ability to write strategic incident objectives for a simulated emergency response to a release of hazardous materials.
- (D) Student shall explain the purpose, need, and elements of command/scene management; and, demonstrate capability to implement ICS.

- (E) Student shall explain identification and hazard assessment techniques to aid the IC in action planning for a Haz Mat incident.
- (F) Student shall explain the hazards, risks and limits of protective equipment commonly used in Haz Mat incidents; and, cite the role of the Incident Commander regarding the selection and use of personal protective equipment.
- (G) Student shall identify the IC role in selecting safe containment and control methods to stabilize a hazardous materials incident.
- (H) Student shall describe two primary Haz Mat protective action options, identify factors to evaluate in selecting a protective action option and cite their practical application.
- (I) Student shall describe steps to bring the incident to final closure after stabilization, providing for proper decontamination and cleanup; and cite the role of the Incident Commander in decontamination.
- (J) Student shall cite basic Haz Mat disposal requirements and cite funding sources with available to the IC.
- (K) Student shall identify the need for documentation at Haz Mat incidents; and demonstrate ability to properly complete pertinent reports.
- (L) Student shall identify government and private sector resources available to assist in an emergency response to a release of hazardous materials and state their jurisdiction, authority and capabilities.
- (M) Student shall understand their own local pre-event Haz Mat plan; how to implement the management system used in that plan; be aware of the state plan; and describe the role of the federal regional response teams.
- (N) Student shall explain the role of IC regarding response personnel's safety.
- (O) Student shall describe a process for the management of a safe and competent response to a Haz Mat incident, including explanation of the risk vs. gain concept.
- (P) Student shall identify the legal role and rights of the media in a Haz Mat incident and understand media capabilities to aid the IC.
- (Q) Student shall identify the need for investigations of releases of hazardous materials and the role of the Incident Commander in those investigations.
- (R) Student shall explain value, types, and limits of exercises and critiques.

- (S) Student shall state the purpose of and the criteria for the activation of an Emergency Operation Center and cite how it is a resource to aid in managing a Haz Mat disaster.
- (T) Student shall cite current Haz Mat laws and potential legal liabilities pertinent to the IC's employer.
- (2) Certified curriculum for Incident Commander Level shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for an Incident Commander Course shall be a minimum of 32 hours in length if the class participants have not had First Responder Operations training meeting the minimum competencies specified in Title 8, California Code of Regulations, Section 5192(q). If all of the class participants have had such training and present proof of that to the Course Manager then the minimum hours for a Certified Course may be 24 hours. A Certified Course 24 hours in length shall meet only the course objectives of this Section and may delete the course objectives in Section 2520(a)(1) and Section 2520(b)(1) and the training exercise in paragraph(4)(A) of this Section.
- (4) Certified curriculum for Incident Commander Course shall include the following training exercises:
- (A) Demonstrate proper use of the current Department of Transportation North American Emergency Response Guide Book to include the following:
- (i) Given ten or more United Nations four-digit numbers and or chemical names, participants will identify guide number, including primary hazard, basic actions, and isolation and protective action distances as needed.
- (B) Participation in a tabletop exercise or simulated field functional Haz Mat exercise including successful completion of the following objectives:
- (i) Demonstrate the ability to assume ICS command and general staff positions, set up a unified command post, and establish communication and coordination with all response agencies during a simulated Haz Mat incident;
- (ii) Based on a simulated Haz Mat incident, manage a complete identification and hazard assessment process;
- (iii) Based on a complete identification and hazard assessment process, write an incident action-plan leading to the mitigation of a simulated Haz Mat incident; and,
- (iv) Demonstrate the ability of command to ensure the safety of all responders by completing an ICS Form 208 HM, Revised 3/98, (Site Safety and Control Plan).
- (5) Certified curriculum for Incident Commander Course shall include the following evaluation method:

- (A) Completion of a CSTI certified IC written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the Incident Commander Course shall include successful completion of a certified course as referenced in section 2520 (c) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 32 hours (or 24 hours for a class meeting the requirements of paragraph (3) of this Section), accomplish all objectives, participate in training exercises (except as noted in paragraph (3) of this Section) and complete the evaluation method at the 70% standard as referenced in section 2520 (c).
- (d) Hazardous Materials Emergency Response Executive Management.
- (1) Certified curriculum for Hazardous Materials Emergency Response Executive Management Course shall include all of the following course objectives:
- (A) Student shall understand the current Haz Mat problem, compare the various levels of Haz Mat responders, and identify the role of Executive Manager in a Haz Mat day-to-day emergency and disaster response.
- (B) Student shall grasp an awareness of laws pertaining to, and liability incurred by, government response personnel, Executive Managers, and the jurisdiction itself, when planning for, and responding to, a Haz Mat emergency/disaster.
- (C) Student shall identify the essential components of 29 CFR 1910.120 and Title 8, CCR section 5192 as they pertain to planning, response, training and safety requirements for government agencies responding to a Haz Mat emergency/disaster.
- (D) Student shall understand need to communicate and coordinate with any agency having authorized activities dealing with a Haz Mat incident, recognizing agencies' essential roles, needs, and limits; and, describe the purpose, essential components, value and limits of Haz Mat pre-event and event-specific plans.
- (E) Student shall understand the needs of agency personnel providing the operational response to a field Haz Mat emergency, and describe the responsibilities of management for the safety of those personnel, including regulations requiring specified safety standards for Haz Mat responders.
- (F) Student shall identify the Haz Mat emergency responders' operational actions and limits, explaining required notifications, resources, and mutual aid concepts while responding to, and managing, a Haz Mat emergency/disaster.
- (G) Student shall describe the purpose and need to safely initiate command, and identify need and resources for identification and assessment of Haz Mat, so as to initiate action to mitigate the Haz Mat emergency/disaster.

- (H) Student shall explain the need for, types and limits of protective equipment commonly used in Haz Mat emergencies, identify methods to stabilize the incident through safe containment, and describe primary Haz Mat protective action options.
- (I) Student shall describe the legal role and need of the media at a Haz Mat incident, and understand media capabilities and limitations to aid in the response.
- (J) Student shall understand need and components of a Haz Mat scene management system, and identify use of ICS to assume command and general staff positions to manage the incident.
- (K) Student shall understand value and need for proper decontamination and cleanup including issues for contracting with cleanup companies.
- (L) Student shall grasp an awareness of Haz Mat disposal requirements and funding sources with potential impact to the Executive Manager.
- (M) Student shall identify the need for documentation at Haz Mat incident, and essential components of a Haz Mat report.
- (N) Student shall describe the purpose and activation of an EOC and identify the common ICS positions that may report to the EOC during a Haz Mat disaster response.
- (O) Student shall explain value, types, and limits of training, exercises and critiques.
- (P) Student shall identify need and steps for investigations leading to possible prosecution of the responsible party of the Haz Mat incident.
- (Q) Student shall describe the need and possible strategies for mitigation of, and recovery from, a Haz Mat emergency/disaster.
- (2) Certified curriculum for Hazardous Materials Emergency Response Executive Management Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Executive Manager Course shall be a minimum of 8 hours in length.
- (4) Certified curriculum for Hazardous Materials Executive Emergency Response Manager Course shall include all of the following training exercises:
- (A) Participation in a simulated tabletop exercise including the successful completion of the following objectives:
- (i) Identify criteria to activate the EOC;

- (ii) Identify staffing by ICS titles and responsibilities for those required to report to the EOC;
- (iii) Identify the use of single or unified command in the EOC.
- (B) Completion of a draft Haz Mat policy and/or report regarding one of the following subject areas:
- (i) Use of scene management system at a Haz Mat incident;
- (ii) Safety requirements at a Haz Mat incident;
- (iii) Planning requirements before and during a Haz Mat incident;
- (iv) Training and exercising requirements for a Haz Mat incident;
- (v) Mitigation program for Haz Mat incident;
- (vi) Public information program for Haz Mat incident;
- (vii) Recovery program for Haz Mat incident; and,
- (viii) EOC activation, set-up, and staffing policy.
- (5) Certification for participants in the Hazardous Materials Emergency Response Executive Management Course shall include successful completion of a certified course as referenced in section 2520(d) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of eight hours, accomplish all objectives, and participate in training exercises as referenced in section 2520(d).
- (e) Hazardous Materials Emergency Response Principles of Environmental Crimes Investigations.
- (1) Certified curriculum for Hazardous Materials Principles of Environmental Crimes Investigations Course shall include all of the following course objectives:
- (A) Student shall recognize an environmental crime investigation site and develop procedures for proper identification, containment, evidence gathering and case development.
- (B) Student shall understand proper state and federal laws and regulations dealing specifically with Haz Mat investigations.
- (C) Student shall identify the safety considerations and determine the characteristics of a Haz Mat incident and the possibility of a violation of a criminal or civil law.
- (D) Student shall demonstrate how to safely and competently respond to a Haz Mat incident and conduct an investigation within the limitations of available resources.

- (E) Student shall explain the need for, types, selection criteria and limits of protective equipment commonly used in Haz Mat incidents.
- (F) Student shall recognize the need and the process to obtain and serve search and inspection warrants.
- (G) Student shall understand the purpose and the different methods for comprehensive report writing at a Haz Mat incident investigation.
- (H) Student shall identify the need and method to communicate and coordinate with any and all agencies having authorized activities dealing with a Haz Mat incident, recognizing those agencies' roles and capabilities.
- (I) Student shall develop techniques for both witness interviews and alleged criminal interrogations at a Haz Mat incident.
- (J) Student shall demonstrate proper methods of field chemical sampling at a Haz Mat incident.
- (K) Student shall demonstrate proper safe and competent response to a simulated Haz Mat environmental crime scene.
- (L) Student shall demonstrate proper case preparation by submitting documentation and evidence to a simulated District Attorney panel.
- (M) Student shall identify the role and placement of environmental crimes investigators within the Incident Command System.
- (N) Student shall recognize specific characteristics and considerations associated with environmental crimes investigations at fixed facilities.
- (O) Student shall recognize specific characteristics and considerations associated with environmental crimes investigations at transportation incidents.
- (P) Student shall understand the importance of effectively working with the media.
- (Q) Student shall recognize major information sources available to environmental crimes investigators.
- (2) Certified curriculum for the Hazardous Materials Principles of Environmental Crimes Investigations Course shall include all of the current course material listed in 2540(t).
- (3) Certified curriculum for Hazardous Materials Principles of Environmental Crimes Investigations Course shall be a minimum of 40 hours in length.

- (4) Certified curriculum for Hazardous Materials Principles of Environmental Crimes Investigations Course shall include the following training exercises:
- (A) Demonstrate proper safe and competent response to a simulated field Haz Mat environmental crime scene; and,
- (B) Demonstrate proper case preparation of the above environmental crime scene which will be submitted to a simulated District Attorney's panel for review and comment.
- (5) Certification for participants in the Hazardous Materials Principles of Environmental Crimes Investigations Course shall include successful completion of a certified course as referenced in section 2520(e) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, and participate in training exercises as referenced in section 2520(e).
- (f) Hazardous Materials Emergency Response Environmental Monitoring.
- (1) Certified curriculum for Hazardous Materials Emergency Response Environmental Monitoring Course shall include all of the following course objectives:
- (A) Student shall understand the basics of Haz Mat sampling, including method selection criteria, purpose and objective, types of samples, and development of a sampling plan.
- (B) Student shall identify analytical standards used for air and soil/water samples.
- (C) Student shall identify the levels of protection of monitoring personnel.
- (D) Student shall identify basic air surveillance and soil/water equipment used during a Haz Mat incident.
- (E) Student shall understand the documentation and chain-of-custody procedures at a Haz Mat sampling site.
- (F) Students shall identify packaging, marking, labeling and shipping of Haz Mat samples.
- (G) Student shall identify legal considerations dealing with the sampling procedures.
- (H) Student shall identify quality control considerations necessary for air surveillance and soil/water samples.
- (2) Certified curriculum for the Hazardous Materials Emergency Response Environmental Monitoring Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Environmental Monitoring Course shall be a minimum of 40 hours in length.

- (4) Certified curriculum for Hazardous Materials Emergency Response Environmental Monitoring Course shall include the following training exercise:
- (A) Demonstrate proper use to the instructor of air, soil and water monitoring equipment to include sorbent traps, aerosol filters, organic vapor analyzer, photoionization detector, gas chromatographs and infrared spectrometer.
- (5) Certified curriculum for Hazardous Materials Emergency Response Environmental Monitoring Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Environmental Monitoring written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the Hazardous Materials Emergency Response Environmental Monitoring Course shall include successful completion of a certified course as referenced in section 2520(f) as delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in section 2520(f).
- (g) Hazardous Materials Emergency Response Incident At Ports.
- (1) Certified curriculum for Hazardous Materials Emergency Response Incident at Ports Course shall include all of the following course objectives:
- (A) Student shall compare and contrast the differences in port activities with other Haz Mat activity sources.
- (B) Student shall identify the organizations and responsibilities of various port authorities.
- (C) Student shall identify the unique agencies or special units with the appropriate authorities involved with port activities including, but not limited to, the U.S. Coast Guard and the Office of Oil Spill Prevention and Response.
- (D) Student shall determine the various types of vessels commonly found in ports and the unique characteristics of their construction and operation.
- (E) Student shall compare the unique response considerations with conventional response considerations when dealing with port incidents.
- (F) Student shall be able to write, revise, and review specific contingency plans dealing with port emergency operations in Haz Mat incidents including, but not limited to, the National Contingency Plan and applicable Area Contingency Plans.

- (2) Certified curriculum for the Hazardous Materials Emergency Response Incident at Ports Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Incident at Ports Course shall be a minimum of 8 hours in length.
- (4) Certified curriculum for Hazardous Materials Incident at Ports Course shall include the following training exercise:
- (A) Participation in a Haz Mat table-top exercise including successful completion of the following objectives:
- (i) Demonstrate proper safety, isolation and notifications for a simulated table-top Haz Mat incident at a port;
- (ii) Based on simulated Haz Mat release, demonstrate a basic identification process;
- (iii) Based on an identification and hazard assessment process, identify the proper safe containment and protective action options; and,
- (iv) Identify essential information to be given by the First Responder to the Incident Commander.
- (5) Certified curriculum for Hazardous Materials Incident at Ports Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Haz Mat Incidents At Ports written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the Hazardous Materials Incident at Ports Course shall include successful completion of a certified course as referenced in Section 2520(g) as delivered by a CSTI certified instructor as referenced in Section 2530. Student shall meet a minimum attendance of 8 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in Section 2520(g).
- (h) Hazardous Materials Emergency Response Instructor Certification.
- (1) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification Course shall include all of the following course objectives:
- (A) Student shall demonstrate an understanding of the background and objectives of the California Hazardous Substances Incident Response Training and Education Program as administered by the Office of Emergency Services, California Specialized Training Institute, as referenced in California Government Code section 8574.20.

- (B) The student shall recognize the need for competent instructors to deliver standardized training to hazardous materials responders in the field.
- (C) Student shall identify practical techniques for trainers to better facilitate adult learning.
- (D) Student shall explain the importance of performance objectives, the need for instructor discipline to accomplish performance objectives, and the value of a motivating delivery technique in achieving performance objectives.
- (E) Student shall understand the certified curriculum for the certified course(s), as referenced in section 2520 in which the student is seeking instructor certification.
- (F) Student shall understand the importance of presenting a positive first impression.
- (G) Student shall understand the essential details in preparing for a class.
- (H) Student shall demonstrate an awareness of the Haz Mat audio-visual materials available to support the certified course(s), as referenced in Section 2520 in which the student is seeking instructor certification.
- (I) Student shall explain the four-step method of lesson plan development and write one module of a lesson plan for use in the instructional delivery.
- (J) Student shall identify effective communication methods and techniques.
- (K) Student shall identify the various types of training aids, understand basic techniques for using boards, overhead transparencies and flip charts, and develop at least one training aid for use in the instructional simulation.
- (L) Student shall cite the essential elements involved in delivering the class.
- (M) Student shall demonstrate an awareness of the requirements to design and deliver successful practical activities that will enhance the trainer's instructional delivery.
- (N) Student shall demonstrate the ability to competently instruct at least a 10-minute portion of one block of instruction from the certified course(s), as referenced in Section 2520 in which the student is seeking instructor certification before a peer group and video camera for critique.
- (O) Student shall positively critique and compare instructional methods and techniques of the blocks of instruction delivered by other students in the class.
- (P) Student shall recognize the need and techniques for testing, evaluating and closing the class.

- (Q) Student shall demonstrate an understanding of the California Hazardous Substances Incident Response Training and Education Program requirements, minimum standards, and administrative policies and procedures for state certification as referenced in sections 2510-2560.
- (R) Student shall understand proper completion of administrative forms for requesting, delivering, documenting and certifying hazardous materials courses as referenced in section 2540.
- (2) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification Course shall be a minimum of 32 hours in length.
- (4) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification shall include the following instructional simulations:
- (A) First Impressions Presentation by Student:
- (i) Student shall give a three to five-minute presentation on any subject dealing with Haz Mat response in order for peer group to evaluate first impressions.
- (B) Instructional Delivery:
- (i) Student shall deliver a minimum ten-minute portion of a certified curriculum, as referenced in Section 2520 in which the student is seeking instructor certification before a peer group and video camera for critique.
- (5) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Haz Mat Instructor Certification written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the Hazardous Materials Emergency Response Instructor Certification Course shall include all of the following:
- (A) Successful completion of the certified course(s), as referenced in section 2520 in which the student is seeking instructor certification;
- (B) Successful completion of the certified course as referenced in section 2520(h) and as coordinated by a CSTI Haz Mat section faculty member; and,

- (C) Meet a minimum attendance of 32 hours, accomplish all course objectives, complete the evaluation method at the 70% standard and participate in the instructional simulation as referenced in section 2520(h).
- (i) Hazardous Materials Emergency Response Instructor Certification For Trainers.
- (1) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification For Trainers Course shall include all of the following course objectives:
- (A) Student shall demonstrate an understanding of the background and objectives of the California Hazardous Substances Incident Response Training and Education Program as administered by the Office of Emergency Services, California Specialized Training Institute, as referenced in California Government Code section 8574.20.
- (B) The student shall recognize the need for competent instructors to deliver standardized training to hazardous materials responders in the field.
- (C) Student shall identify practical techniques for trainers to better facilitate adult learning.
- (D) Student shall explain the importance of performance objectives, the need for instructor discipline to accomplish performance objectives, and the value of a motivating delivery technique in achieving performance objectives.
- (E) Student shall understand the certified curriculum for the certified course(s), as referenced in Section 2520 in which the student is seeking instructor certification.
- (F) Student shall understand the importance of a positive first impression.
- (G) Student shall understand the essential details in preparing for a class.
- (H) Student shall demonstrate an awareness of the Haz Mat audio-visual materials available to support the certified course(s), as referenced in section 2520 in which the student is seeking instructor certification.
- (I) Student shall explain the four-step method of lesson plan development.
- (J) Student shall identify effective communication methods and techniques.
- (K) Student shall identify the various types of training aids, understand basic techniques for using boards, overhead transparencies and flip charts, and develop at least one training aid for use in the instructional simulation.
- (L) Student shall cite the essential elements involved in delivering a class.

- (M) Student shall demonstrate an awareness of the requirements to design and deliver successful "hands-on" practical application activities that will enhance the trainer's instructional delivery.
- (N) Student shall demonstrate the ability to competently instruct at least a 10-minute portion of one block of instruction from the certified course(s), as referenced in Section 2520 in which the student is seeking instructor certification before a peer group.
- (O) Student shall positively critique and compare instructional methods & techniques of the blocks of instruction delivered by other students in the class.
- (P) Student shall recognize the need and techniques for testing, evaluating and closing the class.
- (Q) Student shall demonstrate an understanding of the California Hazardous Substances Incident Response Training and Education Program requirements, minimum standards, and administrative policies and procedures for state certification as referenced in sections 2510-2560.
- (R) Student shall understand proper completion of administrative forms for requesting, delivering, documenting and certifying hazardous materials courses as referenced in Sections 2540-2550.
- (2) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification For Trainers Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification For Trainers Course shall be a minimum of 16 hours in length.
- (4) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification For Trainers Course shall include the following instructional simulation:
- (A) Instructional Delivery:
- (i) Student shall deliver a minimum ten-minute portion of a certified curriculum, as referenced in section 2520 in which the student is seeking instructor certification before a peer group for critique.
- (5) Certified curriculum for Hazardous Materials Emergency Response Instructor Certification for Trainers Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Haz Mat Emergency Response Instructor Certification for Trainers written exam with a minimum passing score of 70% correct.

- (6) Certification for participants in the Hazardous Materials Emergency Response Instructor Certification For Trainers Course shall include all of the following:
- (A) Successful completion of the certified course(s), as referenced in section 2520 in which the student is seeking instructor certification;
- (B) Successful completion of the certified course as referenced in section 2520(i) as coordinated by a CSTI Haz Mat section faculty member; and,
- (C) Meet a minimum attendance of 16 hours, accomplish all course objectives, complete the evaluation method at the 70% standard, and, participate in the instructional simulation as referenced in section 2520(i).
- (j) Hazardous Materials Emergency Response Instructor Recertification.
- (1) Certified curriculum for Hazardous Materials Emergency Response Instructor Recertification Course shall include all of the following course objectives:
- (A) Student shall be able to demonstrate an understanding of the background and objectives of the California Hazardous Substances Incident Response Training and Education Program as administered by the Office of Emergency Services, California Specialized Training Institute, as referenced in California Government Code section 8574.20.
- (B) Student shall be able to understand the certified curriculum for the certified course(s), as referenced in section 2520 in which the student is seeking instructor recertification.
- (C) Student shall demonstrate an awareness of the current Haz Mat audio-visual materials and reference materials available to support the certified course(s), as referenced in section 2520 in which the student is seeking instructor recertification.
- (D) Student shall be able to demonstrate an understanding of the California Hazardous Substances Incident Response Training and Education Program requirements, minimum standards, and administrative policies and procedures for state certification as referenced in sections 2510-2560.
- (E) Student shall be able to understand proper completion of administrative forms for requesting, delivering, documenting and certifying hazardous materials courses, as referenced in sections 2540-2550.
- (2) Certified curriculum for Hazardous Materials Emergency Response Instructor Recertification Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Instructor Recertification Course shall be a minimum of 6 hours in length.

- (4) Certified curriculum for Hazardous Materials Emergency Response Instructor Recertification Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Hazardous Materials Emergency Response Instructor Recertification written exam with a minimum passing score of 70% correct.
- (5) Certification for participants in the Hazardous Materials Emergency Response Instructor Recertification Course shall include all of the following:
- (A) Successful completion of the certified course(s), as referenced in section 2520 in which the student is seeking instructor recertification;
- (B) Successful completion of the certified course as referenced in section 2520(h) or (i) as coordinated by a CSTI Haz Mat section faculty member;
- (C) Successful completion of the certified course as referenced in section 2520(j) by a CSTI Haz Mat section faculty member; and,
- (D) Meet a minimum attendance of 6 hours, accomplish all course objectives, and complete the evaluation method at the 70% standard, as referenced in section 2520(j).
- (k) Hazardous Materials Emergency Response Technician/Specialist (1A): Basic Chemistry.
- (1) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry shall include all of the following course objectives:
- (A) The student shall identify the levels of haz mat response training required for certification. The student shall recognize chemical compounds in terms of general categories and classifications.
- (B) The student shall define the terms "chemistry" and "matter," identify the three states of matter, recognize the differences between pure substances and mixtures, and recognize physical and chemical properties.
- (C) The student shall identify the three physical forms or states of matter, distinguish the differences between chemical and physical change, list the 6 different processes that result in a physical change in state, define "exothermic" and "endothermic," and identify the role of catalysts.
- (D) The student shall identify symbols, names of elements, and atomic numbers on a periodic table; determine the logical systematic order of elements; and list the names of four families and describe their hazards.
- (E) The student shall indicate the parts and regions of an atom, define the weight and charge of each atomic particle, name the four families and their outer shell electron configuration, explain the octet/duet rule and predict the type of ion formed by each family. The student shall identify the hazard of each family including reactivity and

oxidation ability. The student shall also list the features of reducing agents and oxidizing agents.

- (F) The student shall define bonding, determine the composition of a salt or a non-salt and recognize the two types of bonding.
- (G) The student shall identify the type of salt and predict the hazards, recognize the general physical, chemical, health and environmental properties of salts and non-salts.
- (H) The student shall recognize non-salts and hydrocarbons, identify the general properties of non-salts and hydrocarbons, and recognize the difference between saturated and unsaturated compounds.
- (I) The student shall identify alkane, alkene, alkyne and aromatic hydrocarbons; draw the structures of hydrocarbons including isomers or aromatics; and explain the general toxicity of saturated and unsaturated hydrocarbons.
- (J) The student shall define the terms "isomer" and "hydrocarbon radical"; and name and draw the structure of the alkane, alkene, alkyne and aromatic radical or isomer.
- (K) The student shall identify the type of hydrocarbon derivative and identify its hazardous properties.
- (L) The student shall define the physical parameters of vapor pressure, vapor content, vapor density, specific gravity, boiling point, flash point, polarity, and standard and normal temperature and pressure; and correctly identify the relative ranking of chemicals with respect to these physical parameters when compared to other chemicals.
- (M) The student shall recognize those materials that are explosive, provide examples and define the terms "fuel," "oxidizer," "explosive" and "crystals" as they relate to explosives.
- (N) The student shall identify the three states that gases are transported in and define the term "expansion ratio."
- (O) The student shall identify those compounds that are most likely to be flammable liquids or gases and polar solvents, based upon their chemical characteristics, name and formula.
- (P) The student shall identify those elements or compounds that are likely to be solids and identify their potential to be combustible or pyrophoric.
- (Q) The student shall identify those compounds that are most likely to be oxidizers or organic peroxides based upon their chemical composition.

- (R) The student shall identify the common names and formulas associated with poisons and list field test methods.
- (S) The student shall identify those compounds that are most likely to be radioactive based upon their chemical composition.
- (T) The student shall define the term "corrosivity," describe the two main division of corrosives, list the physical states that corrosives are found in and identify some of the hazards of corrosive materials.
- (U) The student shall define the concepts: fire, oxidation, the fire tetrahedron, heat transfer, ignition temperature, flammable limits, and standard temperature and pressure. The student shall also be able to explain the difference between slow and fast oxidation, the effects of oxygen on the combustion process, and the factors to consider when assessing an incident for the potential of fire.
- (V) The student shall list the three products of combustion, the three factors that determine hear content, and the three factors that determine vapor quantity. Additionally, the student shall describe the effect of flame on combustion, and explain the differences between the products of complete and incomplete combustion. The student shall define "backdraft" and "flashover," and explain the conditions that lead to those events. The students shall list at least 3 of the products of incomplete combustion that are considered toxic.
- (2) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry shall include all of the current course material listed in Section 2540(t). Each course manager must provide and display for the duration of the class, at least two wall-mounted "Periodic Table of The Elements" that are at least four feet by eight feet in size and visible from any part of the classroom.
- (3) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry Course shall be a minimum of 40 hours in length.
- (4) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry Course shall include the following evaluation method:
- (A) Completion of the CSTI certified Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry Course Final Exam with a minimum passing score of 70% correct.
- (5) Certification for participants in the Haz Mat Emergency Response Technician/Specialist (1A) Basic Chemistry Course shall include successful completion of the certified course as referenced in 2520(k), delivered by a CSTI certified instructor as referenced in 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, participate in the training exercises and complete the evaluation method at the 70% standard as referenced in section 2520(k).

- (l) Hazardous Materials Emergency Response Technician/Specialist (1B): Applied Chemistry.
- (1) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry shall include all of the following course objectives:
- (A) The student shall define the term "matter", list the three states of matter, describe physical and chemical change, giving examples of each, read and interpret information from the periodic table, describe atomic structure and list the four families: alkali metals, alkaline earths, halogens and noble gases. The student shall also list six salts, provide the chemical formula and list the hazards of each. The student shall be able to identify and name non-salts, list the hydrocarbon radicals and derivatives, draw their structural formulas and list the hazards associated with each.
- (B) The student shall describe the method for fighting explosives fires; recognize explosives by their chemical formula, structure or characteristics; list initiators of explosives; and describe the 5 DOT divisions of explosives. The student shall also list the four categories of explosives, giving examples and characteristics of each; define and give examples of explosophores; and list several common explosives.
- (C) The student shall list 3 of the multiple hazards that the gases hazard class could have, and describe the common characteristics of gases and how they are measured. The student shall predict the behavior of gases using the concepts of the gas laws and critical temperature and pressure. The student shall describe the 3 conditions of gas storage and list the hazards associated with each.
- (D) The student shall list the multiple hazards of flammable liquids and describe the following physical properties: vapor pressure, flash point, ignition temperature, flammable range, explosive limits, specific gravity, vapor density, boiling point, and the definitions of flammable and combustible liquids. The student shall also predict the probable location of flammable atmospheres from low and high vapor pressure liquids. The student shall list the three special conditions (boilover, slopover and frothover) associated with burning flammable liquids; the effects of oxidizers on flammable liquids; how solubility is determined; and the effect of molecular weight on vapor pressure, boiling point, flash point, ignition temperature and heat output.
- (E) The student shall identify the process of oxidation; list several electronegative elements; describe spontaneous combustion, pyrolysis, surface burning and hypergolic combustion; and list the three types of ignition: pilot, auto, and spontaneous. The student shall also list three elements that burn and their allotropes, and describe the flammable solids cellulose nitrate and naphthalene. The student shall list several flammable and combustible metals and their hazards.
- (F) The student shall describe the processes of oxidation and reduction, describe and provide examples of halogen gases, oxy-salts, oxy-acids, metal peroxide salts, inorganic peroxides and oxygen. Additionally, the student shall identify the peroxide functional group in organic oxidizers and identify the NFPA classification system for oxidizers.

Students shall also list some common uses of organic peroxides, identify them by name or formula, list the hazards and classification of organic peroxides, define maximum safe storage temperature and safe accelerating decomposition temperature and list the general hazards of organic peroxides.

- (G) The student shall describe the two types of radiation (ionizing and non-ionizing), identify those elements that are naturally radioactive, describe each of the three types of ionizing radiation and the three types of protective measures. The student shall define the terms roentgen, RAD, REM, mREM, curie and half-life. The student shall be able to list the various sources of background radiation and a typical annual exposure. The student shall also identify the one time emergency response exposure, the effect of free radicals, the difference between internal and external contamination and contamination vs. exposure.
- (H) The student shall describe the difference between the strength and concentration of corrosives, including how these are measured and how they pertain to the risk posed by that corrosive. The student shall describe the reaction that occurs between acids and bases and other materials. Also, the student shall describe the processes of absorption, dilution and neutralization, including the advantages and disadvantages of each of these methods when used for mitigating corrosives spills.
- (I) The student shall describe the importance of chemical compatibility to responders, recognize the 4 types of chemical reactions, list the rules of solubility and use an incompatibility chart to determine the potential reaction(s) between two materials.
- (J) The student shall describe the process of looking for contaminants in air, list the major components of a normal atmosphere, and list the types of contaminants which make an atmosphere hazardous. The student shall list the OSHA requirements for entry into a confined space, describe the process of finding unknown gases based on vapor density and interpreting results. Also, the student shall list the four uses of monitoring and the types of instruments available, including the capabilities of each. The student shall utilize a monitoring strategy to analyze unknown atmospheres including an analysis of site specific conditions.
- (K) Students shall describe the principles of operation of Radiation Monitoring devices and demonstrate their use with sample sources of radioactive material.
- (L) The student shall define what Combustible Gas Indicators (CGI's) are designed to detect, describe how they operate, demonstrate how to prepare the CGI for use and how to monitor an unknown atmosphere, describe how to interpret the results, and list some of the limitations associated with CGI's.
- (M) The student shall define what Photoionization Detectors (PID's) are designed to detect, describe how they operate, demonstrate how to prepare the PID for use and how to monitor an unknown atmosphere, describe how to interpret the results, and list some of the limitations associated with PID's.

- (N) The student shall identify what colorimetric tubes, electrochemical sensors, flame ionization detectors and infrared spectroscopy are designed to detect; describe how these various devices work; and identify some of the use considerations and limitations associated with these devices.
- (O) Given at least ten unknown substances, four of which are solid, and six liquids, the student shall be able to identify or classify by hazard each of the unknown substances using the "Five-Step Field Identification Method of Chemicals" or another CSTI-approved method.
- (P) The student shall identify safe and unsafe behaviors as they pertain to chemical handling.
- (Q) The student shall identify the principles and tests used in field identification kits to determine the hazards or identity of unknown chemicals.
- (R) The student shall define toxicology, list 2 subdivisions of toxicology, and identify dose as a key concept in toxicology. The student shall also compare risk and hazard, and identify the difference between the two.
- (S) The student shall list the seven basic types of toxins and describe the characteristics and behavior of each. The student shall also describe the two major determinants that affect toxicity, list the three routes of entry and describe their characteristics, and list and describe the three means the body has for dealing with toxins. The student shall describe the concept of dose-response relationships, list the factors that affect dose response values and define the terms "lethal dose (LD)", "lethal concentration (LC)", "no observed effect level (NOEL)", "threshold limit value (TLV)", "permissible exposure limit (PEL)", "short term exposure limit (STEL)", "immediately dangerous to life and health (IDLH)", "maximum allowable concentration(MAC)", "level of concern (LOC)" and emergency response planning guide (ERPG).
- (T) The student shall list some physical and chemical ways in which chemicals can cause harm. Also, the student shall describe the cell as the focal point of the biochemistry of toxins and how some organs are targets to toxins, describe the field of environmental toxicology and demonstrate the awareness of the irreversibility of some environmental spills. The student shall also be able to list and describe the concepts of ozone layer depletion, bioaccumulation, biomagnification, biological oxygen demand, and chemical oxygen demand. Lastly, the student shall describe and provide examples of organophosphate and carbamate pesticides, and describe the biochemical mechanism, including the antidote, for organophosphate poisoning.
- (2) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry shall include all of the current course material listed in Section 2540(t). Each course manager must provide and display for the duration of the class, at

least two wall-mounted "Periodic Table of The Elements" that are at least four feet by eight feet in size and visible from any part of the classroom.

- (3) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry Course shall be a minimum of 40 hours in length.
- (4) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry Course shall include the following training exercise:
- (A) Participation in a "Field Identification of Unknown Solid and Liquid Chemical" exercise including successful completion of the following objectives:

Using the "Five-Step Field Identification Method of Chemicals" or another CSTI approved method, and given 10 unknown substances (four being solid and six being liquid) --

- (i) The student shall classify the substances by chemical or physical hazards;
- (ii) The student shall determine the proper hazard/risk potential;
- (iii) The student shall select the appropriate protective clothing and monitoring equipment for that particular substance; and,
- (iv) The student shall recommend proper mitigation procedures.
- (5) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry Course shall include the following evaluation method:
- (A) Completion of all of the CSTI certified Haz Mat Technician/Specialist (1B) Applied Chemistry Course Final Exam with a minimum passing score of 70% correct.
- (6) The following materials/training aids/equipment are required for teaching the Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry Course:
- (A)(i) Test kits for field identification of unknown chemicals (one kit for every three students);
- (ii) Solid and liquid chemical samples for field identification (these should consist of, at a minimum, various flammable and combustible liquids, acids, caustics, cyanides and sulfides, oxidizers, chlorinated hydrocarbons and water reactives); and,
- (iii) Safety equipment (including, but not limited to: splash protection, eye protection, head protection, feet protection) for all student use during field identification exercise.
- (7) Certification for participants in the Haz Mat Emergency Response Technician/Specialist (1B) Applied Chemistry Course shall include successful

completion of the certified course as referenced in Section 2520(1), delivered by a CSTI certified instructor as referenced in Section 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in Section 2520(1).

- (m) Hazardous Materials Emergency Response -- Technician/Specialist (1C): Incident Considerations.
- (1) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1C) Incident Considerations shall include all of the following course objectives:
- (A) The student shall identify the types of hazard and response information available from reference manuals, hazardous materials data bases, technical information centers (i.e. CHEMTREC) and technical information specialists. The student shall explain the advantages and disadvantages of each resource. The student shall also utilize various reference sources to identify hazard and response information about various hazardous materials.
- (B) The student shall identify how various meteorological factors may influence a hazardous materials incident.
- (C) The student shall recognize general protective action concepts associated with hazardous materials response, with specific emphasis on evacuation and shelter-in-place options.
- (D) The student shall identify the factors to be considered in selecting proper respiratory protection. Students shall describe the advantages, limitations, proper use and operational components of air purifying respirators at a hazardous materials incident.
- (E) The student shall identify the three types of vapor-protective, splash-protective and support-function clothing and describe the advantages and disadvantages of each. The student shall identify the four levels of chemical protection (EPA/NIOSH) and match both the equipment required for each level and the conditions under which each level is used. The student shall explain the significance of degradation, penetration and permeation as they relate to suit selection.
- (F) The student shall identify the factors to be considered and the process involved in selecting the proper chemical protective clothing, at least three indications of material degradation of chemical protective clothing, and the relative advantages and disadvantages of various cooling methods/devices.
- (G) The student shall recognize basic ICS concepts as they apply to hazardous materials incidents, the general organization of the Incident Command System and some of the standard ICS forms.
- (H) The student shall describe the duties of a member of the Command Staff within the Incident Command System at a hazardous materials incident.

- (I) The student shall describe the duties of the Haz Mat Group Supervisor within the Incident Command System at a hazardous materials incident.
- (J) The student shall describe the duties of the Technical Specialist Haz/Mat Reference within the Incident Command System at a hazardous materials incident.
- (K) The student shall recognize the importance of establishing control zones and identify the three control zones to be established at a hazardous materials incident.
- (L) The student shall describe the duties of the Site Access Control Leader within the Incident Command System at a hazardous materials incident.
- (M) The student shall describe the duties of the Entry Team Leader within the Incident Command System at a hazardous materials incident.
- (N) The student shall describe the duties of the Decontamination Team Leader within the Incident Command System at a hazardous materials incident.
- (O) The student shall describe the components of a site safety plan for a hazardous materials incident and identify key points that should be made in a safety briefing prior to working on the scene.
- (P) The student shall describe the duties of the Assistant Safety Officer Haz Mat within the Incident Command System at a hazardous materials incident.
- (Q) The student shall describe the duties of the Safe Refuge Area Manager within the Incident Command System at a hazardous materials incident.
- (R) The student shall identify various non-bulk and intermediate bulk packaging, the types of materials they contain, basic design and construction features, and some of the marking requirements for the various packages.
- (S) The student shall identify the following regarding intermodal tank containers: tank construction features, tank markings, general classes of tanks, tank fittings and how to handle hazardous materials in tank containers.
- (T) The student shall describe the type of carrier and material most commonly involved in highway hazardous materials incidents.
- (U) The student shall identify the types of shipping papers that may be found on rail cars, as well as the types of information they contain.
- (V) The student shall identify some of the general types of transport vehicles used in rail transportation.

- (W) The student shall identify various tank cars by type, capacity and contents they typically transport. The student shall also identify various tank markings and construction features.
- (X) The student shall identify various tank car fittings that may be found on the different types of tank cars.
- (Y) The student shall identify how a liquid pipeline may carry different products, the types of information which may be found on a pipeline marker, basic guidelines to follow for mitigating pipeline incidents and some of the regulations pertaining to pipeline construction and safety.
- (Z) The student shall identify some of the chemicals used in illegal drug manufacturing operations and the hazards associated with drug labs. The students shall also identify several warning signs indicating the presence of a drug lab, as well as appropriate safety and tactical considerations to take at an incident scene.
- (AA) The student shall identify basic design and construction features of storage tanks found at fixed facilities, the types of materials they may contain, and the types of damage that they could incur. The student shall identify some of the fire and safety protection systems that may be required at a fixed facility or bulk storage facility, and how these systems impact the behavior of the products during an incident. The student shall also identify some guidelines for managing a hazardous materials incident at a fixed facility.
- (BB) The student shall identify the types of vessels that may be involved in maritime incidents and some of the hazards associated with them, as well as the types of shipping papers that will be carried on these vessels and some of the information they contain. The student shall identify who the responsible authority will be and some basic guidelines to follow in the event of a maritime incident.
- (CC) The student shall identify some of the metals used in aircraft construction, and the advantages and disadvantages of each, as well as the fuels and fluids generally found aboard aircraft and their associated hazards. The student shall identify regulations pertaining to air transport of hazardous materials, and the types of shipping papers required and some of the information they contain. The student shall also identify some basic airport safety considerations.
- (DD) The student shall recognize the significant federal and state laws and regulations pertaining to hazardous materials and hazardous waste, as well as some of the key provisions of each. The student shall recognize potential areas of liability in dealing with hazardous materials incidents, as well as guidelines that can be implemented both before and during an incident to minimize liability for response personnel.
- (EE) The student shall identify some of the key components of a hazardous materials area plan.

- (FF) The student shall identify components of the three phases of an effective incident termination: debriefing, post-incident analysis and critique.
- (2) Certified curriculum for Haz Mat Emergency Response Technician/Specialist (1C) Incident Considerations shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1C) Incident Considerations Course shall be a minimum of 40 hours in length.
- (4) Certified curriculum for Haz Mat Technician/Specialist (1C) Incident Considerations Course shall include the following training exercises:
- (A) Participation in an Introduction to Protective Clothing Exercise, including successful completion of the following objective:
- (i) Student shall be able to identify and discuss the basic concept of chemical protective clothing, component parts, types of manufacturer, and the importance of compatibility charts.
- (B) Participation in an Introduction to Levels of Chemical Protective Clothing Exercise including successful completion of the following objectives:
- (i) Student shall be able to identify and discuss the basic concept of levels of chemical protective clothing; and,
- (ii) Student shall be able to identify different systems, and explain which one is the most appropriate for use in the fire service.
- (C) Participation in an evaluation scenario including successful completion of the following objectives:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome;
- (ii) Identify and perform the appropriate positions within the Incident Command System required to manage the simulated incident;
- (iii) Identify and utilize the technical references used for providing information for product identification, chemical protective clothing selection, tactical operations and decontamination procedures;
- (iv) Select and use proper chemical protective clothing, (CPC) and equipment;
- (v) Develop and utilize a Site Safety Plan;

- (vi) Develop and utilize and Incident Action Plan;
- (vii) Identify and use the accepted standard operating procedures for hazardous materials incidents; and,
- (viii) Participate in a post-scenario analysis.
- (D) Participation in a Chemical Protective Clothing Considerations Exercise including successful completion of the following objective:
- (i) Student shall be able to identify and discuss the protocols necessary to support a hazardous materials team when readying to use CPC.
- (5) Certified curriculum for the Haz Mat Emergency Response Technician/Specialist (1C) Incident Consideration Course shall include the following evaluation methods:
- (A) Completion of the Haz Mat Emergency Response Tech/Specialist (1C) Incident Considerations Course Reference Material Worksheet with a minimum passing score of 70% correct; and.
- (B) Completion of the CSTI certified Haz Mat Emergency Response Tech/Spec (1C) Incident Considerations Course Final Exam with a minimum passing score of 70% correct.
- (6) The following materials/training aids/equipment are required for teaching the Haz Mat Technician/Specialist (1C) Incident Considerations Course:
- (A) Student Text Books (one per student)-
- (i) "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," (85-115) by NIOSH, OSHA, USCG, and EPA;
- (B) Reference Materials (one copy per every 10 students)-
- (i) Chemical Dictionary (Hawley's);
- (ii) Dose Makes the Poison (Ottoboni);
- (iii) Handbook of Reactive Chemical Hazards (L. Bretherick);
- (iv) CHRIS Manual (U.S. Coast Guard);
- (v) Merck Index;
- (vi) Dangerous Properties of Industrial Materials (SAX);

(vii) Farm Chemical Handbook (Meister);
(viii) Pocket Guide to Chemical Hazards (NIOSH);
(ix) Fire Protection Guide on Hazardous Materials (NFPA);
(x) California Haz Mat Incident Contingency Plan (OES 1991); and,
(xi) Guidelines For Chemical Protective Clothing (ACGIH)
(C) Chemical Protective Clothing (one each for demonstration)-
(i) Level A;
(ii) Flash Protection Over Suit;
(iii) Cryogenic Over Suit;
(iv) Level B;
(v) Level C;
(vi) Chemical Resistant Boots;
(vii) Chemical Resistant Gloves;
(vii) Eye Protection (Goggles and Safety Glasses); and
(ix) Hearing Protection.
(D) Forms:
(i) Generic Site Safety Plan;
(ii) Current ICS Forms, including:
a. Form 201 Incident Briefing,b. Form 202 Incident Objectives,c. Form 205 Incident Radio Communications Plan, and

d. Form 208 HM Site Safety Plan, Revised 3/98

e. Form 214 Unit Log.

(7) Certification for participants in the Haz Mat Emergency Response Tech/Spec (1C) Incident Considerations Course shall include successful completion of the certified course as referenced in 2520(m), delivered by a CSTI certified instructor as referenced in 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives,

participate in the training exercises and complete the evaluation method at the 70% standard as referenced in section 2520(m).

- (n) Hazardous Materials Emergency Response--Technician/Specialist (1D): Tactical Field Operations.
- (1) Certified curriculum for Haz Mat Emergency Response--Tech/Spec (1D): Tactical Field Operations shall include all of the following course objectives:
- (A) The student shall define evidence; explain the importance of chain of custody, search warrants and proper documentation; and identify important guidelines regarding the collection of specific types of evidence.
- (B) The student shall identify various environmental, mechanical, physiologic and psychological stresses that personnel working in chemical protective clothing are subjected to.
- (C) Student shall identify the mechanisms by which heat builds up in workers operating in chemical protective clothing, and the appropriate measures to take for someone experiencing a heat related illness.
- (D) Student shall identify procedures by which hazardous materials response personnel shall be medically evaluated at incidents.
- (E) The student shall identify guidelines for dealing with injured or trapped persons at a hazardous materials incident.
- (F) The student shall identify operational situations which may exceed the capabilities of responders training, equipment or technical feasibility.
- (G) The student shall identify some of the ways in which chemicals could be used for terrorism.
- (H) The student shall identify some of the problems and resources which must be evaluated in order to triage hazardous materials incidents.
- (I) The student shall identify the basic principles of containment, as well as some of the factors which may complicate the containment operations.
- (J) The student shall identify the two types of dams used to contain hazardous materials and the key points regarding dam construction.
- (K) The student shall identify some of the factors which should be considered when making decision to dike a leak, some of the diking materials which may be used and how it may be possible to use surrounding areas in dike construction.
- (L) The student shall identify some of the other measures which may be used to contain a spill.

- (M) The student shall identify various offensive control options that may be utilized at a hazardous materials incident including repositioning leaking drums, overpacking, using absorbents, plugging, patching and catching. The student shall describe the purpose of, procedures for, equipment required and safety precautions appropriate for each method. The student shall also identify guidelines for taking samples of a hazardous material.
- (N) The student shall identify the various decontamination methods, the types of decontamination, factors that can affect the decon process and resources needed to set up a Contamination Reduction Corridor. The student shall also identify general guidelines for Emergency Decon, including sources for selecting appropriate decon procedures and solutions.
- (O) The student shall describe the procedures for donning and doffing SCBA, and describe how to properly respond to emergencies with the SCBA.
- (P) The student shall describe the procedures for donning and doffing Level "A" Chemical protective clothing.
- (Q) The student shall demonstrate the use of emergency hand signals.
- (R) The student shall don Level "A" chemical protective clothing and perform simulated hazardous materials mitigation skills in an "obstacle course" (an activity requiring them to complete exercises involving the performance of manipulative tasks commonly carried out in a response to a hazardous materials incident). The student shall complete the course or proceed through the course within the limits of one full SCBA tank.
- (S) The student shall demonstrate the use of grounding and bonding equipment for product transfer.
- (T) The student shall demonstrate the use of plugging and patching equipment for drums.
- (U) The student shall demonstrate the use of transfer pumps for product transfer between drums.
- (V) The student shall demonstrate the safe use of a drum hand truck.
- (W) The student shall demonstrate the safe use of a drum upender.
- (X) The student shall demonstrate overpacking of a 55 gallon drum by the "V-Roll" and "End Over" Techniques.
- (Y) The student shall demonstrate the use of plugging and patching equipment for repairing leaks on piping systems.
- (Z) The student shall demonstrate the use of plugging and patching equipment for horizontal and vertical storage tanks.

- (AA) The student shall demonstrate the safe use of chemical sampling equipment for solids and liquids.
- (BB) The student shall demonstrate the safe use of absorbent materials for containing a liquid spill.
- (CC) The student shall demonstrate the collection of evidence at a hazardous materials incident, including the use of chain of custody forms, evidence seals, scene mapping and photography.
- (DD) The student shall demonstrate the basic principles of containment.
- (EE) The student shall demonstrate the safe application of a "Chlorine Institute A Kit".
- (FF) The student shall demonstrate the safe application of a "Chlorine Institute B Kit".
- (GG) The student shall demonstrate the ability to perform the following functions at a simulated hazardous materials incident:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome.
- (ii) Identify and perform the appropriate ICS positions required to manage the simulated incident.
- (iii) Utilize appropriate technical references to determine product identification and hazards, chemical protective clothing required, and appropriate tactical operations and decon procedures.
- (iv) Select and use proper chemical protective clothing and equipment.
- (v) Develop and utilize a site safety plan.
- (vi) Develop and utilize an Incident Action Plan.
- (vii) Identify and perform appropriate decontamination procedures.
- (viii) Identify and use the appropriate tools and equipment necessary to mitigate the simulated problem.
- (ix) Identify and use the selected method for field identification of the released hazardous material.
- (x) Identify and use accepted Standard Operating Procedures for hazardous materials incidents.

- (HH) The student shall participate in an Incident Debriefing and a Post Incident Analysis.
- (2) Certified curriculum for Haz Mat Emergency Response--Tech/Spec (1D): Tactical Field Operations shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for the Haz Mat Emergency Response: Tech/Spec (1D): Tactical Field Operations Course shall be a minimum of 40 hours in length.
- (4) Certified curriculum for the Haz Mat Emergency Response: Tech/Spec (1D): Tactical Field Operations Course shall include the following training exercises:
- (A) Participation in a Preservation of Evidence Exercise including successful completion of the following objectives:
- (i) Identify the crime scene perimeter.
- (ii) Identify the appropriate steps necessary to document the crime scene with photography.
- (iii) Prepare a crime scene sketch indicating the location of all evidence to be recovered.
- (iv) Prepare an itemized evidence list.
- (B) Participation in a Solid and Liquid Sampling Exercise including successful completion of the following objectives:
- (i) Identify and use the appropriate tools and equipment required for taking a sample of a solid hazardous material.
- (ii) Identify and use the appropriate tools and equipment required for taking a sample of a liquid hazardous material.
- (C) Participation in a Weather and Plume Prediction Exercise or a Damming, Diking and Diverting Exercise including successful completion of the following objectives:
- (i) Use a Belt Weather Kit to evaluate current weather conditions.
- (ii) Using a desktop or laptop computer air dispersion prediction program and given a chemical do a plume prediction based on current weather.

or

- (iii) Construct an overflow dam to control flowing products.
- (iv) Construct an underflow dam to control flowing products.

- (v) Construct a dike to control flowing product from entering a storm drain or sewer.
- (vi) Construct a diversion channel to control flowing product.
- (D) Participation in a Plugging, Patching and Overpacking Exercise including successful completion of the following objectives:
- (i) Demonstrate patching various size leaks in a fifty-five gallon drum.
- (ii) Demonstrate overpacking a fifty-five gallon drum.
- (iii) Demonstrate the proper use of a Chlorine "A" kit.
- (iv) Demonstrate proper use of a Chlorine "B" kit.
- (v) Demonstrate controlling various leaks in a pipe prop.
- (vi) Demonstrate proper use of a pneumatic tank bandage to control a leak in an above-ground tank.
- (E) Participation in an Evaluation Scenario including successful completion of the following objectives:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome.
- (ii) Identify and perform the appropriate positions within the Incident Command System required to manage the simulated incident.
- (iii) Identify and utilize the technical references used for providing information for product identification, chemical protective clothing selection, tactical operations and decontamination procedures.
- (iv) Select and use proper Chemical Protective Clothing and equipment.
- (v) Develop and utilize a Site Safety Plan.
- (vi) Develop and utilize an Incident Action Plan.
- (vii) Identify and perform appropriate decontamination procedures.
- (viii) Identify and use the appropriate tools and equipment necessary to mitigate the simulated problem.

- (ix) Identify and use the selected method for field identification of the simulated released hazardous material.
- (x) Identify and use the accepted standard operating procedures for hazardous materials incidents.
- (xi) Participate in a post-scenario analysis.
- (5) Certified curriculum for the Haz Mat Emergency Response: Tech/Spec (1D): Tactical Field Operations Course shall include the following evaluation method:
- (A) Completion of the CSTI certified Haz Mat Emergency Response: Tech/Spec (1D): Tactical Field Operations Final Exam with a minimum passing score of 70% correct.
- (6) The following materials/training aids/equipment are required for teaching the Haz Mat Emergency Response: Tech/Spec (1D) Hazard and Risk Assessment Course:
- (A) Drums that have been designed with leaks of the following types:
- (i) One Side Void (e.g. fork lift or nail puncture);
- (ii) One Bung Leak (damaged threads); and,
- (iii) One Chine Leak (1/16 holes or saw cut).
- (B) Drums for sampling:
- (i) One 17 E with threaded bung, 55 gal.;
- (ii) One 17 H with removable top, 55 gal.; and,
- (iii) One non-operable (weld or braze bungs closed).
- (C) Overpack:
- (i) One DOT 49 CFR 173.3 Salvage Drum, 85 gal.;
- (ii) One DOT 49 CFR 173.3 Salvage Drum, 8 gal.; and,
- (iii) One DOT 49 CFR 173.3 Salvage Drum, polyethylene.
- (D) One 100-150 lb. Chlorine Container designed for vapor leak from the valve area.
- (E) One 1 Ton Chlorine Container designed for liquid and vapor leaks from valve and fusible plug. Container shall be designed to allow instructor to change leak from a liquid to a vapor when students roll the container.

(F) One Fixed Bulk Storage Tank (minimum of 200 gallon capacity) with leaks of a type to facilitate the application of a tank bandage.
(G) One Storm Drain designed to allow water flow from an outfall line for students to construct an underflow dam to contain hazardous materials.
(H) One Piping System designed to leak liquid or vapor on 2.5 inch or larger pipes including the following:
(i) Valve, Flange, Weld, and Thread Failures;
(ii) Cracked Pipe; and
(iii) Sheared Pipe.
(I) Drum-related:
(i) Plug and Dike;
(ii) Bung Wrench;
(iii) Foam Wedges;
(iv) Epoxy Putty;
(v) Grounding and Bonding;
(vi) New Bungs;
(vii) Speed Wrench and Socket;
(viii) Drum Repair Kit;
(ix) Drum Hand Truck;
(x) Transfer Pump;
(xi) Redwood Plugs; and,
(xii) Drum Lifter.
(J) Chlorine-related:
(i) A Kit; and,

(ii) B Kit.
(K) Fixed Storage Tank-related:
(i) Patching Kits;
(ii) Pneumatic Patching Equipment; and,
(iii) 5-Minute Marine Epoxy.
(L) Piping Leaks-related:
(i) Pneumatic Patching Equipment;
(ii) Patching Kits;
(iii) Flange Gaskets;
(iv) Bolts and Nuts; and,
(v) Hand Tools.
(M) Storm Drain-related:
(i) Shovels;
(ii) Sheet Plastic;
(iii) Wheelbarrows;
(iv) Sand;
(v) Over/Underflow Pipes (3-8 inches diameter); and,
(vi) Pneumatic Plugs.
(N) Absorbents (polar and non polar type):
(i) Pads;
(ii) Booms;
(iii) Pillows; and,
(iv) Granular.

(O) Sampling-related:
(i) Colawasa Tube;
(ii) Scoops;
(iii) Pipettes;
(iv) Soil Sample Auger;
(v) Plastic ZipLoc-Type Bags;
(vi) Drum Thiefs;
(vii) Spoons;
(viii) Bottles with Seals and Labels; and,
(ix) 1 Gallon Paint Cans for Overpack.
(P) Monitoring-related:
(i) CGI;
(ii) Oxygen Meter;
(iii) Photoionization Detector;
(iv) Dosimeters;
(v) Radiation Meters, Mr/hr and R/hr;
(vi) Colormetric Tubes;
(vii) Field Chemical ID Kit; and,
(viii) Test Papers.
(Q) Decontamination-related:
(i) Four Containment Pools;
(ii) Four Water Wands;
(iii) Two Hudson Type Garden Sprayers;

(iv) Wash Tubs;
(v) Trash Bags (55 gallon-type);
(vi) Four Garden Hoses or Equivalent;
(vii) Tarps;
(viii) Brush Assortment;
(ix) Sponges; and,
(x) Towels.
(R) Other:
(i) Windsock;
(ii) 20 Traffic Cones;
(iii) Barrier Tape;
(iv) Bull Horn; and
(v) Incident Command Vests:
 a. Haz Mat Group Supervisor; b. Assistant Safety Officer; c. Entry Team Leader; d. Decon Team Leader; e. Technical Reference Leader; and, f. Site Access Leader.
(S) Reference Materials:
(i) Chemical Dictionary (Hawley's);
(ii) Guidelines for the Selection of Chemical Protective Clothing (ACGIH);
(iii) Handbook Of Reactive Chemical Hazards (L. Bretherick);
(iv) CHRIS Manual (U.S. Coast Guard);
(v) Merck Index;
(vi) Dangerous Properties of Industrial Materials (SAX);

- (vii) Farm Chemical Handbook (Meister);
- (viii) Pocket Guide to Chemical Hazards (NIOSH);
- (ix) Fire Protection Guide on Hazardous Materials (NFPA); and,
- (x) California Hazardous Materials Incident Contingency Plan (OES 1991).
- (T) Protective clothing:
- (i) Level A Suits (adequate supply to assure that no suit is worn twice without first being cleaned and disinfected. Suit must provide total encapsulation.);
- (ii) Level B Suits (one per student);
- (iii) Chemical Resistant Boots (one pair per student);
- (iv) Chemical Resistant Gloves (one pair per student);
- (v) Self-Contained Breathing Apparatus Mask (one per student);
- (vi) Self-Contained Breathing Apparatus (one per every two students);
- (U) Current ICS Forms:
- (i) ICS Form 201 -- Incident Briefing;
- (ii) ICS Form 202 -- Incident Objectives;
- (iii) ICS Form 205 -- Incident Radio Communications Plan;
- (iv) ICS Form 208 HM Site Safety Plan Revised 3/98;
- (v) ICS Form 214 -- Unit Log;
- (vi) Generic Medical Monitoring Form; and,
- (vii) Generic Site Safety Plan.
- (7) All leaks generated at the Field Training Facility shall be designed to leak at the approximate gallons per minute (and pressure) that would be found in an actual incident.
- (8) Certification for participants in the Haz Mat Emergency Response: Tech/Spec (1D) Tactical Field Operations Course shall include successful completion of the certified course as referenced in 2520(n), delivered by a CSTI certified instructor as referenced in

- 2530. Students shall accomplish all objectives, participate in all of the training exercises and scenarios and complete the evaluation method at the 70% standard as referenced in section 2520(n).
- (o) (This section reserved for future use.)
- (p) Hazardous Materials Emergency Response Specialist (1F): Specialized Mitigation Techniques.
- (1) Certified curriculum for Haz Mat Emergency Response Specialist (1F) Specialized Mitigation Techniques shall include all of the following course objectives:
- (A) The student shall define the term "matter", list the three states of matter, describe physical and chemical change, giving examples of each, read and interpret information from the periodic table, describe atomic structure and list the four families: alkali metals, alkaline earths, halogens and noble gases. The student shall also list six salts, provide the chemical formula and list the hazards of each. The student shall identify and name non-salts, list the hydrocarbon radicals and derivatives, draw their structural formulas and list the hazards associated with each.
- (B) The student shall identify safe and unsafe behaviors as they pertain to chemical handling.
- (C) Given at least 10 unknown substances, four of which are solid, and six are liquids, the student shall identify or classify by hazard each of the unknown substances.
- (D) The student shall identify safe and unsafe behaviors as they pertain to chemical handling.
- (E) The student shall identify the principles and tests used in field identification kits to determine the hazards or identity of unknown chemicals.
- (F) The student shall describe the process of looking for contaminants in air, list the major components of a normal atmosphere, and list the types of contaminants which make an atmosphere hazardous. The student shall list the OSHA requirements for entry into a confined space, describe the process of finding unknown gases based on vapor density and interpreting results. Also, the student shall list the four uses of monitoring and the types of instruments available, including the capabilities of each. The student shall utilize a monitoring strategy to analyze unknown atmospheres including an analysis of site specific conditions.
- (G) The student shall define what Radiation Detection Monitors are designed to detect, describe how they operate, demonstrate how to prepare the Radiation Monitors for use and how to monitor an unknown atmosphere, describe how to interpret the results, and list some of the limitations associated with Radiation Monitors.
- (H) The student shall describe the development of an incident action plan for a Radioactive Materials Emergency Incident.

- (I) The student shall define what Combustible Gas Indicators (CGI's) are designed to detect, describe how they operate, demonstrate how to prepare the CGI for use and how to monitor an unknown atmosphere, describe how to interpret the results, and list some of the limitations associated with CGI's.
- (J) The student shall define what Photoionization Detectors (PID's) are designed to detect, describe how they operate, demonstrate how to prepare the PID for use and how to monitor an unknown atmosphere, describe how to interpret the results, and list some of the limitations associated with PID's.
- (K) The student shall identify what colorimetric tubes, electrochemical sensors, flame ionization detectors and infrared spectroscopy are designed to detect; describe how these various devices work; and identify some of the use considerations and limitations associated with these devices.
- (L) The student shall recognize explosives by their chemical formula, structure or characteristics; list initiators of explosives. The student shall also list the four categories of explosives, and give examples of common improvised and conventional explosives.
- (M) Student shall identify the mechanisms by which heat builds up in workers operating in chemical protective clothing, and the appropriate measures to take for someone experiencing a heat related illness.
- (N) Student shall identify procedures by which hazardous materials response personnel shall be medically evaluated at incidents.
- (O) The student shall don Level "A" chemical protective clothing and perform simulated hazardous materials mitigation skills. The student shall complete the course or proceed through the course within the limits of one full SCBA tank.
- (P) The student shall demonstrate the use of grounding and bonding equipment for product transfer.
- (Q) The student shall demonstrate the use of plugging and patching equipment for drums.
- (R) The student shall demonstrate the use of transfer pumps for product transfer between drums.
- (S) The student shall demonstrate the safe use of a drum hand truck.
- (T) The student shall demonstrate the safe use of a drum upender.
- (U) The student shall demonstrate overpacking of a 55 gallon drum by the "V-Roll" and "End Over" Techniques.

- (V) The student shall demonstrate the use of plugging and patching equipment for repairing leaks on piping systems.
- (W) The student shall demonstrate the use of plugging and patching equipment for horizontal and vertical storage tanks.
- (X) The student shall demonstrate the safe application of a "Chlorine Institute A Kit".
- (Y) The student shall demonstrate the safe application of a "Chlorine Institute B Kit".
- (Z) The student shall identify the features of a general service railroad tank car.
- (AA) The student shall close a bottom-operated outlet valve to stop a simulated leak on a general service railroad tank car.
- (BB) The student shall tighten the cap/plug on a bottom outlet valve using a pipe wrench on a general service railroad tank car.
- (CC) The student shall close a top-operated bottom outlet valve on a general service railroad tank car.
- (DD) The student shall tighten the stuffing box packing for a top-operating bottom outlet valve using a pipe wrench on a general service railroad tank car.
- (EE) The student shall stop a simulated leak on a general service manway using a wrench on a general service railroad tank car.
- (FF) The student shall manually operate the vacuum breaker valve to depressurize a general service rail car on a general service railroad tank car.
- (GG) The student shall repair a simulated leak on a liquid line valve on a general service railroad tank car.
- (HH) The student shall stop a simulated leak in the vapor line on a general service railroad tank car.
- (II) The student shall stop a simulated leak from a safety relief valve on a general service railroad tank car.
- (JJ) The student shall identify the features of a pressurized rail car.
- (KK) The student shall stop a simulated leak in an angle ball/gate valve on a pressurized rail car.
- (LL) The student shall stop a simulated leak in the sample line on a pressurized rail car.

- (MM) The student shall stop a simulated leak in the thermometer well of a pressurized rail car.
- (NN) The student shall stop a simulated leak in the slip tube gauging device on a pressurized rail car.
- (OO) The student shall stop a simulated leak in the safety relief valve on a pressurized rail car.
- (PP) The student shall identify the dome features of a pressurized chlorine rail car.
- (QQ) The student shall stop a simulated leak on the angle gate valve on a pressurized chlorine rail car.
- (RR) The student shall stop a simulated leak on the safety relief valve of a pressurized chlorine rail car.
- (SS) The student shall identify advantages of recycling, general conditions and restrictions that apply to recycling, and some of the materials that can and cannot be recycled.
- (TT) The student shall identify some of the agencies that might have responsibility for site mitigation management; important considerations regarding funding, transporting waste, utilizing temporary storage facilities, and dealing with citizen concerns. The student shall identify some of the regulations that must be complied with during site mitigation, as well as four legal methods of hazardous waste disposal.
- (UU) The student shall identify the three tactical priorities at a haz mat incident, and essential command and control functions. The student shall also be able to describe the levels that a haz mat incident may be divided into, and list criteria for determining those levels.
- (VV) The student shall demonstrate the ability to perform one of the following functions at a simulated hazardous materials incident:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome.
- (ii) Identify and perform the appropriate ICS positions required to manage the simulated incident.
- (iii) Utilize appropriate technical references to determine product identification and hazards, chemical protective clothing required, and appropriate tactical operations and decon procedures.
- (iv) Select and use proper chemical protective clothing and equipment.

- (v) Develop and utilize a site safety plan.
- (vi) Develop and utilize an Incident Action Plan.
- (vii) Identify and perform appropriate decontamination procedures.
- (viii) Identify and use the appropriate tools and equipment necessary to mitigate the simulated problem.
- (ix) Identify and use the selected method for field identification of the released hazardous material.
- (x) Identify and use accepted Standard Operating Procedures for hazardous materials incidents.
- (WW) The student shall participate in an Incident Debriefing and a Post Incident Analysis.
- (2) Certified curriculum for Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for the Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques Course shall be a minimum of 40 hours in length.
- (4) Certified curriculum for the Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques Course shall include all of the following training exercises:
- (A) Participation in a Level "A" Chemical Protective Clothing Manipulative Obstacle Course including successful completion of all of the following objectives while donned in Level "A" CPC:
- (i) Student shall be able to walk on uneven terrain.
- (ii) Student shall be able to climb a fire service ladder to the working platform on a railroad tankcar.
- (iii) Student shall be able to cross underneath a cargo tank or rail car without touching knees to the ground.
- (iv) Student shall be able to open and/or close a gate valve.
- (v) Student shall be able to right an overturned 55-gallon drum.

- (vi) Student shall be able to select the proper tools and unbolt or reconnect a simulated pipe mount.
- (vii) Student shall be able to remove and replace a drum bung.
- (viii) Student shall be able to remove and replace a threaded pipe cap.
- (ix) Using a drum hand truck, student shall be able to move a full 55-gallon drum 50 feet.
- (x) Student shall be able to shovel 4 shovels full of dirt.
- (xi) Student shall be able to insert a redwood plug in a hole in a tank.
- (xii) Using a hand transfer pump, student shall be able to transfer 2 gallons of water from a 55-gallon drum into a bucket, then pour the bucket into another 55-gallon drum.
- (B) Participation in a Chlorine "B" Kit Exercise, including successful completion of all of the following objectives:
- (i) Student shall be able to select and apply the proper components to mitigate a given leak.
- (ii) Student shall be able to roll a 1-ton container to change a liquid leak into a vapor leak.
- (C) Participation in an Elevated Storage Tank Exercise, including successful completion of all of the following objectives:
- (i) Student shall be able to mitigate leaks using mechanical plugging and patching equipment.
- (ii) Student shall be able to mitigate leaks using pneumatic plugging and patching equipment.
- (iii) Student shall be able to mitigate leaks using granular plugging and patching materials.
- (D) Participation in a Piping Simulator Exercise, including successful completion of all of the following objectives:
- (i) Student shall be able to mitigate leaks using mechanical plugging and patching equipment.
- (ii) Student shall be able to mitigate leaks using pneumatic plugging and patching equipment.

- (E) Participation in a Drum Handling Exercise, including successful completion of all of the following objectives:
- (i) Student shall be able to mitigate leaks using mechanical plugging and patching equipment.
- (ii) Student shall be able to apply chemical patching materials.
- (iii) Student shall be able to demonstrate product transfer operations.
- (iv) Student shall be able to demonstrate over-packing a drum.
- (v) Student shall be able to demonstrate moving a loaded drum.
- (F) Participation in a Level "A" Exercise/Scenario, including successful completion of all of the following objectives:

The student, acting within a team, shall:

- (i) Apply hazard and risk assessment.
- (ii) Employ entry team operations.
- (iii) Utilize sampling and monitoring techniques.
- (iv) Establish control zones.
- (v) Utilize product control methods.
- (vi) Establish decontamination operations.
- (vii) Develop site-safety plans and incident-action plan.
- (viii) Employ rescue/decontamination of the injured.
- (ix) Employ medical surveillance.
- (x) Select appropriate protective clothing, reservice and clean.
- (xi) Employ Incident Command System.
- (xii) Perform field identification of chemical unknowns.
- (xiii) Prepare a press release.

- (xiv) Utilizing the proper current ICS forms, document all incident operations using the following forms:
- (1) ICS Form 201 Incident Briefing;
- (2) ICS Form 202 Incident Objectives;
- (3) ICS Form 205 Incident Radio Communications Plan;
- (4) ICS Form 214 Unit Log;
- (5) Generic Medical Monitoring Form; and,
- (6) Generic Site Safety Plan.
- (5) Certified curriculum for the Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques Course shall include the following evaluation methods:
- (A) Completion of a Level "A" manipulative obstacle course with a minimum passing score of 100%; and,
- (B) Completion of the CSTI certified Hazardous Mat Specialist (1F) Specialized Mitigation Techniques Course Final Exam with a minimum passing score of 70% correct.
- (6) The following materials/training aids/equipment are required for teaching the Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques Course:
- (A) A State Certified Hazardous Materials Field Training Facility (FTF) containing all of the training aids, equipment, reference materials, protective clothing, forms and safety items as designated in Section 2560(a).
- (7) Certification for participants in the Hazardous Materials Emergency Response Specialist (1F) Specialized Mitigation Techniques Course shall include successful completion of the certified course as referenced in 2520(p), delivered by a CSTI certified instructor as referenced in 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in section 2520(p).
- (q) Hazardous Materials Emergency Response Specialist (1G): Tactical Field Operations.
- (1) Certified curriculum for Hazardous Materials Emergency Response Specialist (1G) Tactical Field Operations Course shall include all of the following course objectives:
- (A) Student shall function as a Hazardous Materials Team member under the Incident Command System at a simulated hazardous materials incident.

- (B) Student shall demonstrate the ability to perform the duties of a member of the Command Staff within the Incident Command System at a simulated hazardous materials incident.
- (C) Student shall demonstrate the ability to perform the duties of a member of the Hazardous Materials Group within the Incident Command System at a simulated hazardous materials incident.
- (D) Student shall demonstrate the ability to perform the duties of a member of the Entry Team within the Incident Command System at the simulated hazardous materials incident.
- (E) Student shall demonstrate the ability to perform the duties of a member of the decontamination Team within the Incident Command System at a simulated hazardous materials incident.
- (F) Student shall demonstrate the ability to perform the duties of a member of the Technical Specialist Haz Mat Reference Team within the Incident Command System at a simulated hazardous materials incident.
- (G) Student shall demonstrate the ability to perform the duties of a member of the Site Access Control Team within the Incident Command System at a simulated hazardous materials incident.
- (H) Student shall demonstrate the ability to don and doff chemical protective clothing at a simulated hazardous materials incident.
- (I) Student shall demonstrate the ability to collect and handle chemical samples at a simulated hazardous materials incident.
- (J) Student shall demonstrate the ability to select, operate and interpret readings from atmospheric monitoring instruments at a simulated hazardous materials incident.
- (K) Student shall demonstrate the ability to perform field identification of chemical unknowns at a simulated hazardous materials incident.
- (L) Student shall demonstrate the ability to perform medical monitoring of personnel donned in chemical protective clothing and make recommendations based on the results at a simulated hazardous materials incident.
- (M) Student shall demonstrate the ability to select and use proper hand tools to mitigate or control a chemical release at a simulated hazardous materials incident.
- (N) Student shall demonstrate the ability to implement proper mitigation techniques at a simulated hazardous materials incident.

- (O) Student shall demonstrate the ability to participate in the incident termination phase at a simulated hazardous materials incident.
- (2) Certified curriculum for the Hazardous Materials Emergency Response Specialist
- (1G) Tactical Field Operations Course shall be a minimum of 40 hours in length.
- (3) Certified curriculum for the Hazardous Materials Emergency Response Specialist (1G) Tactical Field Operations Course shall include a minimum of seven of the following training exercises/scenarios, with a minimum of one exercise/scenario conducted in
- (A) Participation in a Release of a simulated DOT Hazard Class 6.1 Poison from a Railroad Tankcar Exercise/Scenario.

reduced lighting (after sunset):

- (B) Participation in a Release of a simulated DOT Hazard Class 2.3 Poison from a Railroad Tankcar Exercise/Scenario.
- (C) Participation in a simulated Accidental Release of Unknown Powered Material from a Truck Accident Exercise/Scenario.
- (D) Participation in an Abandoned Leaking Drums-Multiple Hazard Exercise/Scenario.
- (E) Participation in a Pressurized Gas Leak from a 1-Ton or Smaller Container Exercise/Scenario.
- (F) Participation in a Transportation Incident Release of Product in an Open Area Exercise/Scenario.
- (G) Participation in a Pressurized Pipeline Emergency Exercise/Scenario.
- (H) Participation in a Fixed Bulk Storage Tank Exercise/Scenario.
- (I) Participation in a simulated Radioactive Materials Exposure Exercise/Scenario.
- (J) Participation in a simulated Corrosive Hazardous Materials Release From Railroad Tankcar Exercise/Scenario.
- (K) Participation in a Release of simulated Mixed Hazardous Cargo in a Confined Area Exercise/Scenario.
- (L) Participation in a Collection of Evidence and Cleanup of a simulated Illegal Drug Lab Exercise/Scenario.
- (M) Participation in a Release of a simulated Combustible or Flammable Liquid from a Railroad Tankcar Exercise/Scenario.

- (N) Participation in a simulated Cryogenic Tanker Accident Exercise/Scenario.
- (O) Participation in a simulated Release of a Combustible or Flammable Liquid from MC 306/406 Cargo Tank Exercise/Scenario.
- (P) Participation in a Stinger Operation on an Overturned MC 306/406 Cargo Tank Carrying simulated Combustible or Flammable Liquids Exercise/Scenario.
- (Q) Participation in a Release of a simulated Liquefied Gas from a Railroad Tankcar Exercise/Scenario.
- (4) Certified curriculum for the Hazardous Materials Emergency Response Specialist (1G) Tactical Field Operations Course shall include the following evaluation methods:
- (A) Completion of the CSTI Hazardous Materials Emergency Response Specialist (1G) Tactical Field Operations Course Student Participation Record with a minimum passing score of 70% correct in all of the following manipulative skills:
- (i) Donning, doffing and working in level "A" or "B" chemical protective clothing.
- (ii) Application of atmospheric monitoring equipment including, combustible gas indicator, oxygen sensors, photoionization detector and radiation detection.
- (iii) Collection and handling of samples.
- (iv) Field identification of chemical unknowns.
- (v) Selection and application of leak mitigation equipment.
- (vi) Application of appropriate personnel and equipment decontamination.
- (vii) Interpretation of printed and computer based reference sources.
- (viii) Application of site access control zones.
- (ix) Function as a member of the Hazardous Materials Response Team under the Incident Command System.
- (x) Function as a member of the Entry Team.
- (xi) Function as a member of the Decontamination Team.
- (xii) Function as a member of the Technical Reference Team.

- (5) The following materials/training aids/equipment are required for teaching the Hazardous Materials Emergency Response Specialist (1g) Tactical Field Operations Course:
- (A) A State Certified Hazardous Materials Field Training Facility (FTF) containing all of the training aids, equipment, reference materials, protective clothing, forms, and safety items as designated in Section 2560(a).
- (6) Certification for participants in the Hazardous Materials Emergency Response Specialist (1G) Tactical Field Operations Course shall include successful completion of the certified course as referenced in section 2520(q), delivered by a CSTI certified instructor as referenced in section 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, participate in all training exercises and complete the evaluation methods at the 70% standard as referenced in section 2520(q).
- (r) Hazardous Materials Emergency Response Technician/Specialist: Instructor Orientation
- (1) Certified curriculum for Hazardous Materials Emergency Response Technician/Specialist Instructor Orientation Course shall include all of the following course objectives:
- (A) Student shall demonstrate an understanding of the background and objectives of the California Hazardous Substances Incident Response Training and Education Program as administered by the Office of Emergency Services, California Specialized Training Institute, as referenced in California Government Code Section 8574.20.
- (B) The student shall recognize the need for competent instructors to deliver standardized training to hazardous materials responders in the field.
- (C) Student shall explain the overall organization and responsibilities of OES/CSTI.
- (D) Student shall explain the responsibilities of OES/CSTI in the implementation of the Haz Mat Technician/Specialist Program.
- (E) Student shall understand the certified student curriculum and instructor guides for the certified course(s), as referenced in Section 2520(k)-(q), in which the student is seeking instructor certification.
- (F) Student shall understand the Field Training Facility requirements and inspection procedures as referenced in Section 2560.
- (G) Student shall understand how to safely and competently operate the Training Aids at the CSTI Field Training Facility.
- (H) Student shall demonstrate an awareness of the Haz Mat publications, audio-visual materials, lending libraries, and equipment suppliers available to support the certified

course(s), as referenced in Section 2520(k)-(q), in which the student is seeking instructor certification.

- (I) Student shall demonstrate an understanding of the California Hazardous Substances Incident Response Training and Education Program requirements, minimum standards, and administrative policies and procedures for state certification as referenced in Sections 2510-2560.
- (J) Student shall understand proper completion of administrative forms for requesting, delivering, documenting and certifying hazardous materials courses as referenced in sections 2510-2560.
- (2) Certified curriculum for Hazardous Materials Emergency Response Technician/Specialist Instructor Orientation Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Technician/Specialist Instructor Orientation Course shall be a minimum of 16 hours in length.
- (4) Certified curriculum for Hazardous Materials Emergency Response Technician/Specialist Instructor Orientation Course shall include the following evaluation method:
- (A) Completion of the CSTI certified Haz Mat Emergency Response Technician/Specialist Instructor Orientation Course Final Exam with a minimum passing score of 70% correct.
- (5) Certification for participants in the Hazardous Materials Emergency Response Technician/Specialist Instructors Orientation Course shall include all of the following:
- (A) Successful completion of the certified course(s), as referenced in Sections 2520(k)-(q), in which the student is seeking instructor certification;
- (B) Successful completion of the certified course as referenced in Section 2520(r) as coordinated by a CSTI Haz Mat Section faculty member; and,
- (C) Meet a minimum attendance of 16 hours and accomplish all course objectives as referenced in Section 2520(r).
- (s) Hazardous Waste General Site Worker Course
- (1) Certified curriculum for Hazardous Waste General Site Worker Course shall include all of the course objectives listed below. Course managers shall ensure, to the extent practical, that the training methods used to meet these objectives are focused on the procedures, products and/or facilities in use at the work site and/or industry for which the particular class is directed.

- (A) The student shall demonstrate a knowledge of applicable regulations, to include:
- (i) A review of 8 CCR 5192 (29 CFR 1910.120) and the core elements of an occupational safety and health program
- (ii) The content of a medical surveillance program as outlined in 8 CCR 5192(f) (29 CFR 1910.120(f))
- (iii) The content of an effective site safety and health plan consistent with the requirements of 8 CCR 5192(b)(4)(B) (29 CFR 1910.120(b)(4)(ii))
- (iv) Emergency response plan and procedures as outlined in 8 CCR 5192(l) (29 CFR 1910.120(l) and 29 CFR 1910.38)
- (v) Adequate illumination. 8 CCR 5192(m) (29 CFR 1910.120(m)
- (vi) Sanitation recommendation and equipment. 8 CCR 5192(n) (29 CFR 1910.120(n)
- (vii) Review and explanation of OSHA's hazard-communication standard 8 CCR 5194 (29 CFR 1910.1200) and lock-out-tag-out 8 CCR 3414 (29 CFR 1910.147)
- (viii) Review of other applicable standards and
- (ix) Rights and responsibilities of employers and employees under applicable OSHA and EPA laws.
- (B) The student shall demonstrate a technical knowledge of the following:
- (i) Type of potential exposures to chemical, biological, and radiological hazards; types of human responses to these hazards and recognition of those responses; principles of toxicology and information about acute and chronic hazards; health and safety considerations of new technology.
- (ii) Fundamentals of chemical hazards including but not limited to vapor pressure, boiling points, flash points, pH, other physical and chemical properties.
- (iii) Fire and explosion hazards of chemicals.
- (iv) General safety hazards such as but not limited to electrical hazards, motor vehicle hazards, walking-working surface hazards, excavation hazards, and hazards associated with working in hot and cold temperature extremes.
- (v) Review and knowledge of confined space entry procedures in 8 CCR 5156, 5157 and 5158 (29 CFR 1910.146).

- (vi) Work practices to minimize employee risk from site hazards.
- (vii) Selection, use, maintenance, and limitations of personal protective equipment including the components and procedures for carrying out a respirator program to comply with 8 CCR 5144 (29 CFR 1910.134).
- (viii) Safe use of engineering controls, equipment, and any new relevant safety technology or safety procedures.
- (ix) Review and demonstration of competency with air sampling and monitoring equipment that may be used in a site monitoring program.
- (x) Container sampling procedures and safeguarding; general drum and container handling procedures including special requirements for laboratory waste packs, shock-sensitive wastes, and radioactive wastes.
- (xi) The elements of a spill control program.
- (xii) Proper use and limitations of material handling equipment.
- (xiii) Procedures for safe and healthful preparation of containers for shipping and transport.
- (xiv) Methods of communication including those used while wearing respiratory protection.
- (C) The student shall demonstrate following technical skills:
- (i) Selection, use, maintenance, and limitations of personal protective equipment including the components and procedures for carrying out a respirator program to comply with 8 CCR 5144 (29 CFR 1910.134).
- (ii) Instruction in decontamination programs including personnel, equipment, and hardware; hands-on training including level A, B, and C ensembles and appropriate decontamination lines; field activities including the donning and doffing of protective equipment to a level commensurate with the employee's anticipated job function and responsibility and to the degree required by potential hazards.
- (iii) Sources for additional hazard information; exercises using relevant manuals and hazard coding systems.
- (2) Certified curriculum for Hazardous Waste General Site Worker Course shall be a minimum of 40 hours in length and shall include the below listed training exercises. All training exercises for this course should focus on procedures, products and facilities in use at the work site and/or industry that the particular class is directed at.

- (A) Participation in an Introduction to Protective Clothing Exercise, including successful completion of the following objectives:
- (i) Student shall identify and discuss the basic concept of chemical protective clothing, component parts, types of manufacture, and the importance of compatibility charts and shall explain which type of protective clothing is the most appropriate for use in their workplace.
- (ii) Student shall identify and discuss the basic concept of respiratory protection devices, component parts, types of respiratory protection devices, and the importance of their use and shall explain which one is the most appropriate for use in their workplace.
- (iii) Completion of an activity requiring them to complete a practical exercise while wearing "Level A" or "Level B" complete Chemical Protective Clothing Ensemble appropriate to that work site. The course shall consist of the following manipulative tasks: Walk on uneven ground, walk under a low object, climb a ladder, insert a drum bung, bond and ground a drum, and over-pack a drum.
- (B) Participation in a monitoring and detection device exercise, including successful completion of the following objective:
- (i) Student shall identify, discuss and use monitoring and detection devices in use at their work site and identify and evaluate the meter readings from these monitoring and detection devices from four (4) unknown chemicals.
- (C) Participation in an introduction to offensive and defensive control options exercise, including successful completion of the following objective:
- (i) Student shall be able to identify, discuss and perform the basic concepts of plugging, patching and containment of leaks from containers commonly used at their work site or commonly used at typical hazard waste sites.
- (D) Participation in a chemical sampling exercise, including successful completion of the following objective:
- (i) Student shall be able to identify, discuss and perform the basic concepts of extracting samples from containers commonly used at their work site or commonly used at typical hazard waste sites.
- (E) Participation in characterizing a simulated hazardous waste site to include developing a site specific health and safety program. The health and safety program shall be a written program and incorporate the following:
- (i) Organizational Structure;
- (ii) Comprehensive work plan;

- (iii) Site specific health and safety plan;
- (iv) Training program;
- (v) Medical surveillance program; and
- (vi) Any necessary interface between general program and site specific activities.
- (4) The following materials/training aids/equipment are required for teaching the Hazardous Waste General Site Worker Course:
- (A) Student Text Books (one per student).
- (B) Reference Materials (one copy per every 4 (four) students) to include but not limited to:
- (i) NIOSH Pocket Guide to Chemical Hazards (current edition);
- (ii) ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices (current edition);
- (iii) Appropriate Material Safety Data Sheet(s) for hazardous substances present at the work site, facility and/or industry involved;
- (C) Monitoring equipment used at the work site, facility and/or industry involved (one each for demonstration).
- (D) Personal Protective Equipment used at the work site, facility and/or industry involved (one each for demonstration).
- (E) Personal Protective Equipment, of the Level and type used at the site, facility and/or industry involved, for student use. The course manager shall ensure that there are sufficient suits and respiratory equipment on hand to ensure that no suit or respiratory equipment is worn twice without being cleaned and disinfected.
- (F) Forms used at the work site, facility and/or industry involved, including but not limited to:
- (i) Medical Monitoring Form;
- (ii) Site Safety Health an Safety Plan;
- (iii) Organizational Structure Form.
- (G) Decontamination equipment used at the work site facility and/or industry involved.

- (H) Miscellaneous:
- (i) A device to indicate approximate wind direction and velocity;
- (ii) Methods of restricting access to the simulated control zones;
- (iii) Devices or methods of communication between the simulated project managers, simulated General Site Workers and exercise facilitators:
- (5) Certification for participants in the Hazardous Waste General Site Worker Course shall include all of the following:
- (A) Successful completion of the certified course, as referenced in Section 2520(s)
- (B) Meet a minimum attendance of 40 hours and accomplish all course objectives as referenced in Section 2520(s); and,
- (C) Completion of the CSTI certified Hazardous Waste General Site Worker Course Final Exam with a minimum passing score of 70% or better.
- (i) The final exam shall be given in three (3) increments (one third of the questions at the conclusion of the 16th hour, one third of the questions at the conclusion of the 24th hour, and one third of the questions at the conclusion of the 32nd hour of the course.)
- (t) Hazardous Materials Emergency Response Technician-Private Industry.
- (1) Certified curriculum for Hazardous Materials Emergency Response Technician-Private Industry Course shall include all of the course objectives listed below, except as noted in paragraph (3) of this Section. Course managers shall ensure, to the extent practical, that the training methods used to meet these objectives are focused on the procedures, products and/or facilities in use at the site and/or industry that the particular class is directed at.
- (A) The student shall recognize significant federal and state laws and regulations pertaining to hazardous materials and hazardous waste, as well as key provisions of each law and regulation. The student shall describe his/her rights and responsibilities under OSHA regulations and other related laws.
- (B) The student shall recognize accepted safety practices common to the industrial setting. The student shall identify standard accident prevention concepts.
- (C) The student shall identify key components of his/her employer's hazardous materials emergency response plan.

- (D) The student shall describe the components of a site safety plan for a hazardous materials incident and identify key points that should be made in a safety briefing prior to working on the scene.
- (E) The student shall recognize basic ICS concepts as they apply to hazardous materials incidents, the general organization of the Incident Command System and the applicable standard ICS forms.
- (F) The student shall describe the duties of a member of the Command Staff within the Incident Command System at a hazardous materials incident.
- (G) The student shall describe the duties of each position within the Hazardous Materials Group, to include: The Hazardous Materials Group Supervisor, the Entry Leader, the Decontamination Leader, the Site Access Control Leader, the Safe Refuge Area Manager, the Assistant Safety Officer-Hazardous Materials and Technical Specialist- Hazardous Materials Reference.
- (H) The student shall recognize the importance of establishing control zones and identify the three control zones to be established at a hazardous materials incident.
- (I) The student shall recognize basic chemical and physical terms and behaviors.
- (J) The student shall describe the types of exposure, the toxic effects, the dose-response relationship and terms used to describe toxicity and environmental conditions at a hazardous materials incident.
- (K) The student shall describe OSHA required Medical Programs including Medical Surveillance Program and Medical Monitoring Program.
- (L) The student shall identify the types of hazard and response information available from reference manuals, hazardous materials data bases, technical information centers (i.e. CHEMTREC) and technical information specialists. The student shall explain the advantages and disadvantages of each resource. The student shall utilize various reference sources to identify hazard and response information about various hazardous materials.
- (M) The student shall identify the various types of respiratory protection to include: self contained breathing apparatus (SCBA), supplied air respirators (SAR) and air purifying respirators (APR).
- (N) The student shall identify the three types of Chemical Protective Clothing: vapor-protective, splash-protective and support-function clothing and describe the advantages and disadvantages of each. The student shall identify the four levels of chemical protection (EPA/NIOSH/NFPA) and match both the equipment required for each level and the conditions under which each level is used. The student shall explain the significance of degradation, penetration and permeation as they relate to suit selection.

- (O) The student shall describe the procedures for donning and doffing the respiratory protection devices and protective clothing used at the facility and/or industry involved.
- (P) The student shall identify various environmental, mechanical, physiological and psychological stresses to which personnel working in chemical protective clothing are subjected.
- (Q) The student shall identify the mechanisms by which heat builds up in workers operating in chemical protective clothing, and the appropriate measures to take for someone experiencing a heat related illness.
- (R) The student shall identify procedures by which hazardous materials response personnel will be medically monitored at hazardous materials incidents.
- (S) The student shall describe the various monitoring instruments used for air monitoring to include, but not limited to: A combustible gas indicator, a colorimetric tube, a photo-ionization device, an oxygen detection device. (A multi-detection instrument reading combustible gasses, oxygen, carbon monoxide and hydrogen sulfide may also be used.) The student shall describe the theory of operation for each instrument.
- (T) The student shall identify the hazards and risks involved with confined space operations during a hazardous materials release.
- (U) The student shall describe the information needed to conduct a Hazard and Risk Assessment during a hazardous materials incident.
- (V) The student shall identify various offensive control options that may be utilized at a hazardous materials incident including repositioning leaking drums, overpacking, using absorbents, plugging, patching and catching. The student shall describe the purpose of, procedures for, equipment required and safety precautions appropriate for each method.
- (W) The student shall identify various defensive control options that may be utilized at a hazardous materials incident including damming, diking and diverting. The student shall describe the purpose of, procedures for, equipment required and safety precautions appropriate for each method.
- (X) The student shall identify the various decontamination methods, the types of decontamination, factors that can affect the decontamination process and resources needed to establish a Contamination Reduction Corridor. The student shall also identify general guidelines for Emergency Decontamination, including sources for selecting appropriate decontamination procedures and solutions.
- (Y) The student shall identify guidelines for dealing with injured or trapped persons at a hazardous materials incident.

- (Z) The student shall describe Incident Termination and Recovery Practices and Procedures.
- (AA) The student shall demonstrate the ability to perform one of the following functions at a simulated hazardous materials incident:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome;
- (ii) Identify and perform the appropriate ICS positions required to manage the simulated incident:
- (iii) Utilize appropriate technical references to determine product identification and hazards, chemical protective clothing required, and appropriate tactical operations and decon procedures;
- (iv) Select and use proper chemical protective clothing and equipment;
- (v) Develop and utilize a site safety plan;
- (vi) Develop and utilize an Incident Action Plan;
- (vii) Identify and perform appropriate decontamination procedures;
- (viii) Identify and use the appropriate tools and equipment necessary to mitigate the simulated problem;
- (ix) Identify and use the selected method for identification of the released hazardous material; and,
- (x) Identify and use accepted Standard Operating Procedures for hazardous materials incidents.
- (BB) The student shall participate in an Incident Debriefing and a Post Incident Analysis.
- (CC) Student shall define the term "hazardous materials"; identify how hazardous materials can harm people, the environment and property; and state the role of the First Responder at the Operations level as defined by Title 8 California Code of Regulations §5192(q)(6)(B).
- (DD) Student shall recognize a Haz Mat incident through basic clues, warning signs, placards, labels, shipping papers, and material safety data sheets; identify the hazardous substance(s) present at the incident from a safe distance; understand the need for a positive safety attitude; and, described a safe approach to a Haz Mat incident.

- (EE) Student shall describe first responder awareness actions, understanding the need for responder safety, isolation of the incident scene, the need for additional resources and making required notifications.
- (FF) Student shall identify the purpose and need to safely initiate command; describe basic identification and assessment techniques; demonstrate the use of the Department of Transportation North American Emergency Response Guidebook (current DOT NAERG) for basic action planning.
- (GG) Student shall identify the need and method to communicate and coordinate with typical agencies from all levels of government having authorized activities dealing with a Haz Mat event, citing those agencies, their roles/responsibilities and capabilities.
- (2) Certified curriculum for Hazardous Materials Emergency Response Technician-Private Industry Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Technician-Private Industry Course shall be a minimum of 40 hours in length if the class participants have not had First Responder Operations training meeting the minimum competencies specified in Title 8, California Code of Regulations, Section 5192(q). If all of the class participants have had such training and present proof of that to the Course Manager then the minimum hours for a Certified Course may be 24 hours. A Certified Course 24 hours in length may delete the following course objectives from this Section: (I), (M), (N), (W), and (CC)-(GG). A Certified Course shall include the below listed training exercises. All training exercises for this course should focus on procedures, products and facilities in use at the site and/or industry that the particular class is directed at.
- (A) Participation in an Introduction to Protective Clothing Exercise, including successful completion of the following objectives:
- (i) Student shall identify and discuss the basic concept of chemical protective clothing, component parts, types of manufacturer, and the importance of compatibility charts.
- (ii) Student shall identify and discuss the basic concept of respiratory devices, component parts, types of respiratory devices, and the importance of their use.
- (iii) Completion of a Practical Course wearing "Level A" or "Level B" complete Chemical Protective Clothing Ensemble. The course shall consist of the following manipulative tasks: Walking on uneven ground, negotiate under a low object, climb a ladder, plug and patch a container, insert a drum bung, bond and ground a drum, overpack a drum.
- (B) Participation in an Introduction to Levels of Chemical Protective Clothing Exercise including successful completion of the following objectives:

- (i) Student shall identify and discuss the basic concept of levels of chemical protective clothing; and,
- (ii) Student shall identify different systems, and explain which one is the most appropriate for use in their workplace.
- (C) Participation in an Introduction to Monitoring and detection Device Exercise, including successful completion of the following objective:
- (i) Student shall identify, discuss and use monitoring and detection devices and identify and evaluate the meter readings from six (6) unknown chemicals.
- (D) Participation in an Introduction to Offensive and Defensive Control Options Exercise, including successful completion of the following objective:
- (i) Student shall identify, discuss and perform the basic concepts of plugging, patching and containment.
- (E) Participation in an evaluation scenario including successful completion of the following objectives:
- (i) Analyze the simulated hazardous materials incident to determine the problem and predict the outcome;
- (ii) Identify and perform the appropriate positions within the Incident Command System required to manage the simulated incident;
- (iii) Identify and utilize the technical references used for providing information for product identification, chemical protective clothing selection, tactical operations and decontamination procedures;
- (iv) Select and use proper chemical protective clothing (CPC), and equipment;
- (v) Develop and utilize a Site Safety Plan;
- (vi) Develop and utilize an Incident Action Plan;
- (vii) Identify and perform appropriate decontamination procedures;
- (viii) Identify and use the selected method for field identification of the simulated released hazardous material;
- (ix) Identify and use the accepted standard operating procedures for hazardous materials incidents; and,
- (x) Participate in a post-scenario analysis.

- (4) Certified curriculum for Hazardous Materials Emergency Response Technician-Private Industry Course shall include the following evaluation method:
- (A) Completion of the CSTI certified Haz Mat Emergency Response Technician--Private Industry Course Final Exam with a minimum passing score of 70% correct.
- (5) The following materials/training aids/equipment are required for teaching the Hazardous Materials Emergency Response Technician--Private Industry Course:
- (A) Student Text Books (one per student).
- (i) If the Course Manager conducts the class in 40 hours they shall use the Hazardous Materials Emergency Response Technician--Private Industry Student Notebook.
- (ii) If the Course Manager conducts the class in 24 hours they shall use the Hazardous Materials Emergency Response Technician--Private Industry (24 Hour) Student Notebook.
- (B) Reference Materials (one copy per every 10 students)-
- (i) NIOSH Pocket Guide to Chemical Hazards (current edition);
- (ii) Department of Transportation North American Emergency Response Guidebook (current edition);
- (iii) An appropriate Material Safety Data Sheet for a chemical used at the facility and/or industry involved;
- (iv) California Hazardous Materials Incident Contingency Plan (current edition).
- (C) Monitoring equipment used at the facility and/or industry involved (one each for demonstration).
- (D) Chemical protective clothing used at the facility and/or industry involved (one each for demonstration).
- (E) Chemical protective clothing, of the Level and type used at the facility and/or industry involved, for student use. The course manager shall ensure that there are sufficient suits on hand to ensure that no suit is worn twice without being cleaned and disinfected.
- (F) Forms used at the facility and/or industry involved, including but not limited to:
- (i) Medical Monitoring Form;

- (ii) Site Safety Plan;
- (iii) Current ICS Forms, including:
 - a. Form 201 Incident Briefing,
 - b. Form 202 Incident Objectives,
 - c. Form 205 Incident Radio Communications Plan, and
 - d. Form 214 Unit Log.
- (G) Decontamination equipment used at the facility and/or industry involved.
- (H) Miscellaneous:
- (i) A device to indicate approximate wind direction and velocity;
- (ii) Methods of restricting access to the simulated control zones;
- (iii) Devices or methods of communication between the simulated incident commander, simulated response team and exercise facilitators;
- (iv) Incident Command vests for at least the following ICS positions:
 - a. Haz Mat Group Supervisor,
 - b. Assistant Safety Officer,
 - c. Entry Leader,
 - d. Decon Leader,
 - e. Technical Reference Leader.
 - f. Site Access Leader, and
 - g. Safe Refuge Area Manager.
- (6) Certification for participants in the Hazardous Materials Emergency Response Technician--Private Industry Course shall include all of the following:
- (A) Successful completion of the certified course, as referenced in Section 2520 (t);
- (B) Successful completion of the certified course as referenced in Section 2520 (t) as coordinated by a CSTI Haz Mat Section faculty member; and,
- (C) Meet a minimum attendance of 40 hours, except as noted in Paragraph (3) of this Section and accomplish all course objectives as referenced in Section 2520 (t).
- (u) Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations.
- (1) Certified curriculum for Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations Course shall include all of the following course objectives:

- (A) Student shall recognize an environmental crime scene and follow recognized principles of toxicology, chemistry and sampling while conducting the field investigation.
- (B) Student shall identify areas of the crime scene which would require sampling, obtain an enforcement sample and recognize the type of laboratory analysis needed to prove the case.
- (C) Student shall conduct advanced chemical field testing and identify a series of unknown chemicals by chemical name, DOT hazard class and properties.
- (D) Student shall use the principles of advanced investigation techniques to identify the suspects in a complex investigation.
- (E) Student shall apply the principles of advanced interviewing skills.
- (F) Student shall be familiar with the requirements of conducting undercover operations.
- (G) Student shall become familiar with the skills necessary to conduct surveillance operations.
- (H) Student shall outline the investigative steps necessary to conduct a complex environmental crimes case, collect evidence, explain the process for obtaining search warrants and deliver an oral briefing of the case.
- (I) Student shall understand how to conduct an ethical investigation and know the steps of developing an environmental policy.
- (J) Student shall identify legal trends and legislative updates.
- (K) Student shall know how to conduct successful task force operations.
- (2) Certified curriculum for Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations Course shall be a minimum of 40 hours in length and shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations Course shall include the following training exercises:
- (A) Demonstrate proper procedures for field sampling; and,
- (B) Demonstrate proper procedures for advanced chemical field testing; and,
- (C) Demonstrate ability, through the gathering of information, collection of data from sampling, review of witness statements, to form opinions and determine the correct recommendations for criminal or civil filing of the case.

- (4) Certification for participants in the Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations Course shall include successful completion of a certified course as referenced in Section 2520 (u) as delivered by a CSTI certified instructor as referenced in Section 2530. Student shall meet a minimum attendance of 40 hours, accomplish all objectives, and participate in training exercises as referenced in Section 2520 (u).
- (v) Hazardous Materials Emergency Response Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders.
- (1) Certified curriculum for Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course shall include all of the following course objectives:
- (A) Student shall describe the recognition clues for determining the hazards present to the responder and patients at a hazardous materials incident.
- (B) Student shall describe the need for appropriate decontamination of personnel, patients and equipment, including the ability to identify situations which present risks from secondary contamination.
- (C) Student shall identify the role of Emergency Medical Service personnel at a hazardous materials incident.
- (D) Student shall identify and describe the Emergency Medical Service component at a hazardous materials incident.
- (E) Student shall demonstrate identification and hazard assessment techniques.
- (F) Student shall demonstrate use of the current edition of the North American Emergency Response Guidebook in order to initiate basic action planning.
- (G) Student shall describe the need for, types, selection criteria and limits of personal protective equipment commonly used at a hazardous materials emergency.
- (H) Student shall describe the preparation necessary for receiving patients who have been exposed to hazardous materials, and the treatment considerations for the patient who has been exposed to hazardous materials.
- (I) Student shall describe the monitoring steps and elements of medical support for hazardous materials response personnel.
- (J) Student shall identify patient needs assessment techniques and describe the appropriate level of emergency medical care at a hazardous materials incident.

- (K) Student shall identify the actions required to terminate a hazardous materials incident.
- (3) Certified curriculum for the Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course shall be a minimum of 16 hours in length and shall include all of the course material listed in Section 2540(t).
- (4) Certified curriculum for the Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course shall include the following training exercise:
- (A) Participation in a table-top exercise including successful completion of the following objectives:
- (i) Demonstrate identification and hazard assessment techniques;
- (ii) Demonstrate use of the current version of the North American Emergency Response Guidebook in order to initiate basic action planning.
- (5) Certified curriculum for the Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course shall include the following evaluation method:
- (A) Completion of a CSTI certified Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course written exam with a minimum passing score of 70% correct.
- (6) Certification for participants in the Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Course shall include successful completion of a certified course as referenced by Section 2520 (v) as delivered by a CSTI certified instructor as referenced in Section 2530. Student shall meet a minimum attendance of 16 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in Section 2520 (v).
- (w) Hazardous Materials Emergency Response Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents.
- (1) Certified curriculum for Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents shall include all of the following course objectives:
- (A) Student shall recognize a Haz Mat incident through basic clues, warning signs, placards, labels, shipping papers, and material safety data sheets; understand need for a positive safety attitude; and, describe a safe approach to a Haz Mat incident.
- (B) Student shall describe first responder awareness actions, with an understanding of the need for safety, isolation and making required notifications to a Haz Mat incident.

- (C) Student shall identify the purpose and need to safely initiate command; cite basic identification and assessment techniques; demonstrate the use of the current edition of the North American Emergency Response Guidebook for basic action planning.
- (D) Student shall explain the need for, types, selection criteria and limits of protective equipment commonly used in Haz Mat incidents.
- (E) Student shall identify need for the appropriate field decontamination of victims, emergency response personnel and equipment, in order to avoid additional contamination; and cite the requirements for proper disposal and documentation during a Haz Mat response.
- (F) Student shall describe proper procedures for the set up of a decontamination area at their Emergency Department should a contaminated victim of Hazardous Materials walk in.
- (G) Student shall cite the health effects that Hazardous Materials present to the first responder's life and safety.
- (H) Student shall describe methods to determine what types of Hazardous Materials are used by local industries in order to plan for Hazardous Materials victims in their Emergency Department.
- (I) Student shall describe the equipment and supplies needed for EMS Level 1 responder care and transport of patients.
- (2) Certified curriculum for Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Course shall be a minimum of 8 hours in length and shall include all of the course material listed in Section 2540(t).
- (3) Certified curriculum for Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Course shall include the following training exercises:
- (A) Demonstrate proper use of the current edition of the North American Emergency Response Guidebook to include the successful completion of the following objectives:
- (i) Student shall determine hazards to the first responder and Hazardous Materials victim.
- (ii) Student shall determine if personal protective equipment is appropriate.
- (4) Certified curriculum for Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Course shall include the following evaluation method:

- (A) Completion of a CSTI certified Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Course written exam with a minimum passing score of 70% correct.
- (5) Certification for participants in the Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Course shall include successful completion of a certified course as referenced by Section 2520 (w) as delivered by a CSTI certified instructor as referenced in Section 2530. Student shall meet a minimum attendance of 8 hours, accomplish all objectives, participate in the training exercise and complete the evaluation method at the 70% standard as referenced in Section 2520 (w).
- (x) Hazardous Materials Emergency Response First Responder Operations Decontamination
- (1) Certified curriculum for Hazardous Materials Emergency Response First Responder Operations Decontamination Course shall include all of the following course terminal objectives:
- (A) The student shall understand the need for Decontamination training for First Responders at the Operations Level.
- (B) The student shall understand the basic principles of decontamination.
- (C) The student shall understand the protocols for performing Primary Decontamination, consistent with the FIRESCOPE Incident Command System.
- (D) The student shall participate in a demonstration, walk-through and practice of decontamination protocols, to aid in the ability to set-up a Primary Decon "Contamination Reduction Corridor," per the student's employer's guidelines or generic Decontamination Standard Operating Procedure.
- (E) The student shall understand the personal protective equipment protocols and safety issues associated with Primary Decontamination.
- (F) The student shall participate in an activity requiring them to properly don and doff "Level B" personal protective equipment and an activity requiring them to complete a practical exercise involving the performance of common manipulative tasks while wearing "Level B" personal protective equipment. The student shall understand proper medical monitoring procedures and applicable hand signals before participating in any activity while wearing "Level B" personal protective equipment.
- (G) The student shall perform Primary Decontamination, in "Level B" personal protective equipment per the student's employer's guidelines or generic Decontamination Standard Operating Procedure.
- (H) The student shall review, and if possible improve, their own or a generic Decontamination Standard Operating Procedure based on the key course content.

- (2) Certified curriculum for the Hazardous Materials Emergency Response First Responder Operations Decontamination Course shall include all of the current course material listed in Section 2540(t).
- (3) Certified curriculum for the Hazardous Materials Emergency Response First Responder Operations - Decontamination Course shall be a minimum of 8 hours in length and shall include the below listed training exercises.
- (A) The student shall participate in an activity requiring them to properly don and doff "Level B" personal protective equipment and an activity requiring them to complete a practical exercise involving the performance of common manipulative tasks while wearing "Level B" personal protective equipment. While performing this activity, they must traverse a distance of at least 200 feet.
- (B) Student shall participate in a "Functional Decon Exercise," performing Primary Decontamination, per the student's or generic Decontamination Standard Operating Procedure, that meets the following objectives:
- (i) Demonstrate safe operations throughout the exercise;
- (ii) Demonstrate selection of a safe Contamination Reduction Corridor, and demonstrate setting up the corridor, including all necessary equipment needed for Primary Decon;
- (iii) Demonstrate the safe and effective management and performance of Primary Decon procedures, ensuring "Level B" personal protective equipment in the Contamination Reduction Corridor;
- (iv) Demonstrate the proper use of control zones, and maintain proper personal protective equipment for all personnel within all of those zones; and,
- (v) Participate in a post-exercise debriefing.
- (4) Certified curriculum for Hazardous Materials Emergency Response First Responder Operations Decontamination Course shall include the following evaluation method:
- (A) Completion of the current CSTI certified Hazardous Materials Emergency Response First Responder Operations Decontamination Course Final Exam with a minimum passing score of 70% correct.
- (5) The following materials/training aids/equipment are required for teaching the Hazardous Materials Emergency Response First Responder Operations Decontamination Course:
- (A) Student Text Books (one per student).

- (B) Decontamination equipment to support the student's employer's guidelines or generic Decontamination Standard Operating Procedure.
- (C) Chemical Protective Clothing, and Self Contained Breathing Apparatus, used at the facility and/or agency involved, or "Level B" personal protective equipment (one each for demonstration).
- (D) Medical Monitoring equipment to support the level of Chemical Protective Clothing and Self Contained Breathing Apparatus used at the facility and/or agency involved, or "Level B" personal protective equipment.
- (E) Forms used at the facility and/or agency involved, including but not limited to:
- (i) Medical Monitoring Form; and
- (ii) Site Safety Plan.
- (6) Certification for participants in the Hazardous Materials Emergency Response First Responder Operations Decontamination Course shall include all of the following:
- (A) Successful completion of the certified course, as referenced in Section 2520 (x) as delivered by a CSTI certified instructor as referenced by 2530;
- (B) Meet a minimum attendance of 8 hours and accomplish all course objectives as referenced in Section 2520 (x); and
- (C) Complete the evaluation method at the 70% standard as referenced in Section 2520(x).

Note

Authority cited: Section 8574.20(a), Government Code. Reference: Hazardous Substances Emergency Response Training, Section 8574.20(b), Government Code.

HISTORY

- 1. New section filed 7-8-91; operative 8-7-91 (Register 91, No 46).
- 2. Amendment filed 5-12-94; operative 6-13-94 (Register 94, No. 19).
- 3. Editorial correction (Register 96, No. 52).
- 4. Amendment of section and NOTE filed 12-23-96; operative 1-22-97 (Register 96, No. 52).
- 5. Amendment filed 10-15-98; operative 11-14-98 (Register 98, No. 42).

§ 2530. Instructor Certification Requirements.

- (a) To become a California State Certified Hazardous Materials Instructor for Haz Mat First Responder Awareness/Operations, Haz Mat Incident Commander, Haz Mat Executive Management, Haz Mat Investigations, Haz Mat Environmental Monitoring, or Haz Mat Incidents at Ports, the applicant shall complete all of the following requirements:
- (1) Submission of CSTI Application Form, as referenced in Section 2550(a)(11), to the Office of Emergency Services, California Specialized Training Institute; and

- (2) Agreement to adhere to the policies, procedures and administrative requirements for delivering, documenting, and certifying the California Hazardous Substances Incident Response Training and Education Program as contained in title 2 of the California Government Code, division 1, chapter 7, sections 8574.19-8574.21 and title 19 of the California Code of Regulations, chapter 1, subchapter 2, sections 2510-2560; and
- (3) Successful completion of the certified course(s), as referenced in section 2520(a)-(g), in which the applicant is seeking instructor certification; and
- (4) Submission of a resume and supporting documentation describing a minimum of 2 years work experience in hazardous materials response, training, production, investigations, monitoring, or research, or a combination of any six, at the level in which the applicant is seeking instructor certification, as referenced in section 2520(a)-(g); and
- (5) Successful completion of either (A) or (B):
- (A) Hazardous Materials Instructor Certification Course as referenced in section 2520(h); or
- (B) Hazardous Materials Instructor Certification For Trainers Course as referenced in section 2520(i); and
- (i) California State Fire Marshal Instructor IA and IB Course; or
- (ii) University of California or California State University Techniques of Teaching Course; or
- (iii) Four semester units of upper division credit in educational materials, methods, or curriculum development from an accredited college, university, community college, or institute; or
- (iv) Instructor Certification Course or Teaching Credential from an accredited college, university, community college, or training institute; or
- (v) Instructor Certification Course from a nonprofit organization or public agency.
- (vi) A letter from the applicant's immediate supervisor or training officer verifying the applicant's competence as a hazardous materials trainer as per 29 CFR 1910.120 Appendix E (revised September 21, 1994).
- (b) To become a California State Certified Hazardous Materials Technician/Specialist 1C, 1D, 1F, 1G, Hazardous Waste General Site Worker or Hazardous Materials Emergency Response Technician--Private Industry Instructor, the applicant shall complete all of the following requirements:

- (1) Submission of CSTI Application Form, as referenced in Section 2550(a)(11), to the Office of Emergency Services, California Specialized Training Institute; and
- (2) Agreement to adhere to the policies, procedures and administrative requirements for delivering, documenting, and certifying the California Hazardous Substances Incident Response Training and Education Program as contained in Title 2 of the California Government Code, Division 1, Chapter 7, Sections 8574.19-8574.21 and Title 19 of the California Code of Regulations, Chapter 1, Subchapter 2, Sections 2510-2560; and
- (3) Successful completion of the certified course(s), as referenced in Section 2520(k)-(q), (s) and (t) in which the applicant is seeking instructor certification; and
- (4) Submission of a resume and supporting documentation, including written verification from applicant's department head or designee, describing a minimum of 80 hours of teaching experience and a minimum of 3 years work experience in hazardous materials response, training, production, research, investigations or monitoring, or a combination of any six, relating to the subject area in which the applicant is seeking instructor certification, as referenced in Section 2520(k)-(q), (s) and (t). (To become certified to instruct the Hazardous Waste General Site Worker Course, an applicant's 3 years of work experience must be in the field of hazardous waste operations.); and
- (5) Successful completion of either one of the following:
- (A) Hazardous Materials Instructor Certification Course as referenced in Section 2520(h); or
- (B) Hazardous Materials Instructor Certification For Trainers Course as referenced in Section 2520(i); and,
- (6) Successful completion of the Hazardous Materials Technician/Specialist Instructor Orientation Course as referenced in Section 2520(r).
- (c) To become a California State Certified Hazardous Materials Technician/Specialist 1A, or 1B, Instructor, the applicant shall complete all of the following requirements:
- (1) All of the requirements specified in Section 2530(b); and
- (2) Submission of a photocopy, employer verification or valid supporting documentation for the following:
- (A) Bachelor of Science, or Masters of Science or doctoral degree in a physical or life science that included at least two upper division semester (or equivalent quarters) courses in chemistry; or
- (B) Two upper division semester (or equivalent quarters) courses in college chemistry with a passing grade of "C" or better; and,

- (C) Submission of a resume and supporting documentation, including written verification from applicant's department head or designee, describing a minimum of 80 hours of teaching experience and a minimum of three years of work experience in chemistry training, chemical production or chemical research, or a combination thereof.
- (d) To become a California State Certified Hazardous Materials First Responder Operations - Decontamination Instructor, the applicant shall complete all of the following requirements:
- (1) All of the requirements specified in Section 2530 (a); and
- (2) Complete the Hazardous Materials Emergency Response First Responder Operations Level course, as specified in Section 2520(b); and
- (3) Complete the Hazardous Materials Emergency Response First Responder Operations Decontamination Course Course, as specified in Section 2520 (x).
- (e) To become certified to teach a Hazardous Materials Refresher Course, the applicant shall complete all of the following requirements:
- (1) To instruct refresher classes based on the courses specified in Section 2530 (a), the applicant shall complete;
- (A) All of the requirements specified in Section 2530 (a);
- (2) To instruct refresher classes based on the courses specified in Section 2530 (b), the applicant shall complete;
- (A) All of the requirements specified in Section 2530 (b);
- (3) To instruct refresher classes based on the courses specified in Section 2530 (c), the applicant shall complete;
- (A) All of the requirements specified in Section 2530 (c).
- (f) To become a California State Certified Hazardous Materials Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders Instructor, the applicant shall complete the following requirements:
- (1) All of the requirements specified in Section 2530 (a); and
- (2) Complete the Hazardous Materials Emergency Medical Response to Hazardous Materials Incidents: A Guide for First Responders course, as specified in Section 2520 (v).

- (3) If applicant will be the sole instructor: Submission of a photocopy, employer verification or valid supporting documentation for the following:
- (A) Current certification as an EMT-P, at least two years of response experience as an EMT-P, or previously certified EMT-P with at least five (5) years field experience as an EMT-P, completion of First Responder Operations Level training and completion of the First Responder Operations Decontamination Course as specified in Section 2520 (b) and (x); or
- (B) Current certification as an EMT-II, at least two years of response experience as an EMT-II and certification as a Hazardous Materials Technician as specified in Section 2540 (o); or
- (C) Current certification as an EMT-I, at least two years of response experience as an EMT-I, at least a Bachelor of Science degree in health sciences and certification as a Hazardous Materials Technician or Specialist as specified in Section 2540 (o);
- (5) If applicant will not be the sole instructor: Submission of a photocopy, employer verification or valid supporting documentation for the following: (Applicants certified under this paragraph shall not instruct the sections of the class involving paragraphs (1)(H)-(J) of Section 2520 (v)).
- (A) Completion of First Responder Operational Level training as specified in Section 2520 (b) and at least two years of experience in emergency response.
- (g) To become a California State Certified Hazardous Materials Emergency Response Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Instructor, the applicant shall complete the following requirements:
- (1) All of the requirements specified in Section 2530 (a); and
- (2) Complete the Hazardous Materials Emergency Response Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents course, as specified in Section 2520 (w); and
- (3) All of the requirements specified in Section 2530 (f)(3); or
- (4) Current license as a Registered Nurse, Physician Assistant or Medical Doctor and at least one year of experience in emergency medical response and completion of First Responder Operations Level training as specified in Section 2520 (b).
- (h) To become a California State Certified Hazardous Materials Principles of Environmental Crimes Instructor, the applicant shall complete the following requirements:

- (1) All of the requirements specified in Section 2530 (a); and
- (2) Complete the Hazardous Materials Principles of Environmental Crimes Investigations course, as specified in Section 2520 (e); and
- (3) Provide evidence of current membership (or membership within the last five years) in an Environmental Crimes Investigations Task Force or Unit, and two years of work experience in environmental crimes investigations; and
- (4) Provide evidence of specialized expertise in law enforcement and/or fire operations, environmental health and/or crimes investigations, or criminal justice system procedures and protocols.
- (i) To become a California State Certified Hazardous Materials Emergency Response Advanced Environmental Crimes Instructor, the applicant shall complete the following requirements:
- (1) All of the requirements specified in Section 2530 (a) and (g); and
- (2) Complete the Hazardous Materials Emergency Response Principles of Environmental Crimes Investigations course, as specified in Section 2520 (e); and
- (3) Complete the Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations course, as specified in Section 2520(u); and
- (4) Provide evidence of current membership (or membership within the last five years) in an Environmental Crimes Investigations Task Force or Unit, and;
- (5) Provide evidence of four years of work experience in environmental crimes investigations.

NOTE

Authority cited: Section 8574.20(a), Government Code. Reference: Hazardous Substances Emergency Response Training, Section 8574.20(b), Government Code.

HISTORY

- 1. New section filed 7-8-91; operative 8-7-91 (Register 91, No. 46).
- 2. Amendment of subsections (a)-(a)(2), (4) and (5)(B)(iv) and new subsections (a)(5)(B)(v)-(c)(2)(B) filed 5-12-94; operative 6-13-94 (Register 94, No. 19).
- 3. Amendment of section and Note filed 12-23-96; operative 1-22-97 (Register 96, No. 52).
- 4. Amendment filed 10-15-98; operative 11-14-98 (Register 98, No. 42).

§ 2540. Administrative Procedures.

- (a) Course Manager.
- (1) A Course Manager is a California Certified Hazardous Materials Instructor responsible for monitoring, coordinating, and teaching at least 20% of the certified course, as referenced in section 2520.

- (2) A Course Manager shall ensure that all instructors (both State certified and noncertified) that teach in a certified course adhere to all requirements designated in Sections 2520 and 2540 as specified for the course being taught.
- (3) A Course Manager is responsible for completing, signing, and submitting all required administrative forms as designated in section 2540(c).
- (4) A Course Manager is responsible for requesting, signing, paying for and distributing course certificates to students who successfully complete the course as designated in section 2520.
- (b) Noncertified Instructors.
- (1) A Noncertified Instructor is any instructor who has not received State Certification as referenced in section 2530.
- (2) Noncertified Instructors are permitted to teach in certified courses, as referenced in section 2520, only under the supervision of a Course Manager.
- (3) Noncertified Instructors, who teach in certified courses, are required to adhere to all requirements designated in Sections 2520 and 2540 for the course being taught.
- (c) Course Notification and Certification
- (1) All Course Managers who request State certification for any of the courses referenced in section 2520 shall complete and submit a Training Course Notification Form (HM 100), as designated in section 2550, to the California Specialized Training Institute Hazardous Materials Section no later than six weeks prior to the start of the course in which certification is being requested. If there are any changes in class location, date or time, the Course Manager is required to submit those changes to the CSTI Hazardous Materials Section within 48 hours that the change or changes were made. If any of the changes described above occur within 48 hours of the course's start time, then the Course Manager is required to notify the CSTI Hazardous Materials Section immediately by telephone.
- (2) Course Managers are not permitted to request State certification for Haz Mat Specialist (1F) or (1G) courses, as referenced in Section 2520(p)-(q), until a Field Training Facility for use in said courses has been inspected, approved, and certified according to the procedures established in Section 2560(b).
- (3) All Course Managers who request State certification for any of the courses referenced in section 2520 shall complete, sign and submit all of the following administrative forms, as designated in section 2550, to the California Specialized Training Institute Hazardous Materials section no later than six weeks following the last day of the course in which certification is being requested:
- (A) Course Roster Form (HM 150);

- (B) Student Course Evaluation Forms (HM 140), one per student; and
- §2540. Administrative Procedures.
- (C) Class Schedule Form (HM 130).
- (4) Completion of the Course Manager Course Evaluation Form (HM 160) is optional.
- (5) When a Course Manager completes, signs, and submits the required administrative forms designated in section 2540, he or she is certifying that he/she taught the course according to all of the requirements designated in Sections 2520, 2530 and 2540 for the course being certified and that he/she used the effective course curriculum specified in Section 2540(t).
- (6) All courses shall be completed, including submission of all forms as designated in Section 2540(c)(3) and payment of all certificate fees and course material costs, to the California Specialized Training Institute within one year of course start date or the course will be considered null and void, unless said course has been granted an extension by the Chief of the Hazardous Materials Section per Section 2540(j)(2). Null and void courses are not eligible for certification.
- (d) Certified Course Curriculum
- (1) Course Managers shall not delete any material from a certified curriculum as referenced in section 2520.
- (2) This section does not prohibit Course Managers from adding material which exceeds the minimum requirements established for course curriculum in Section 2520 under the condition that said additions do not contradict established State standards and recognized procedures pursuant to this code.
- (3) Course Managers shall ensure that all students receive a copy of the appropriate student notebook, as referenced in Section 2520 and 2540(t), for students to retain for the duration of the class.
- (4) Course Managers shall ensure that certified classes include all of the requirements specified in the applicable portion of Section 2520.
- (e) Certified Course Exams
- (1) Certified written exams for the courses referenced in section 2520 shall only be developed and revised by the California Specialized Training Institute Hazardous Materials section.
- (2) Certified written exams shall only be administered, corrected, and scored by a California State Certified Hazardous Materials Instructor as referenced in section 2530.

- (3) No California State Certified Instructor or instructor/staff working with a Certified Instructor is permitted to reveal to any student any answers to any certified exam prior to or during the administration of said exam.
- (4) No California State Certified Instructor or instructor/staff working with a Certified Instructor is permitted to reveal to any student any questions from any certified exam prior to the administration of said exam.
- (5) All California State Certified Instructors shall use the most current revision of the certified written exam available from the California Specialized Training Institute at the time of administration of said exam.
- (6) A student who fails to pass an exam on the first attempt may be permitted to retake the exam once, if either of the following cases occur:
- (A) If, in the opinion of the certified instructor who administered the exam, it appears that the student failed the exam because of difficulty with the English language. In such a case, the certified instructor may give the exam orally to the student.
- (B) If, in the opinion of the certified instructor who administered the exam, it appears that the student failed the exam because of lack of knowledge of course material, then the instructor may, at his or her discretion, retrain the student. In such a case, a certified instructor is required to administer the most current alternate version of the written exam, which the student has not taken. The alternate version of the exam shall be taken within 30 calendar days from the date that the student's first exam was administered.
- (7) Any student who fails to pass an exam twice shall be required to retake the entire course in which the student seeks certification.
- (8) Any student found to be cheating by a certified instructor during the administration of a certified exam shall not be permitted to pass the said exam. "Cheating" consists of, but is not limited to, acts by students such as consulting the Student Notebook, notes, Instructor Guide or other reference materials during the administration of a certified exam. Students may use the current version of the Department of Transportation North American Emergency Response Guidebook during the administration of a certified exam.
- (9) Any student not permitted to pass a certified exam because of alleged cheating or any student who failed an exam and seeks to contest any exam questions, may appear in person, within 60 days of said exam, before the California Specialized Training Institute Hazardous Materials Section Chief or his/her representative to request to retake an alternative exam. The Hazardous Materials Section Chief or his/her representative shall approve or deny the request based on evidence presented during the said interview with the student and a follow-up interview with the certified instructor(s) involved.

- (10) Students are not permitted to retain or copy any certified exam. Course Managers must adequately ensure that all certified exams distributed during administration of said exam are returned and accounted for.
- (11) Course Managers are required to retain all student answer sheets on which students marked answers for a minimum of 5 years after date exam was administered. If requested at any time during the five year retention period, the original answer sheets shall be forwarded by the Course Manager to the California Specialized Training Institute Hazardous Materials Section Chief within 10 days.
- (12) The maximum time allowed for students to complete a certified written exam may be specified on said exam. If no time limit is specified, it shall be designated as a maximum of one minute per question (i.e. A 20-question exam shall have a time limit of 20 minutes, unless otherwise specified on said exam). The Course Manager shall inform the students of the specified or designated maximum time limit for said written exam prior to its distribution to students.

(f) Quality Control/Audit Process

- (1) Any course taught by a California State Certified Hazardous Materials Instructor, in which he or she has requested to receive State certification, is subject to unannounced field audits conducted by a faculty member of the California Specialized Training Institute Hazardous Materials Section or any Office of Emergency Services employee or authorized representative designated by the Chief of the California Specialized Training Institute Hazardous Materials Section. Field audits may consist of any of the following:
- (A) Routine audits designed to determine if instructors are meeting the requirements established in Sections 2520 and 2540 for the course in which certification is being requested.
- (B) Special audits investigating complaints of an instructor's misconduct or unprofessional conduct.
- (C) Follow-up audits designed to ensure an instructor's compliance with required course changes and corrections of identified deficiencies.
- (2) Any course taught by a California State Certified Hazardous Materials Instructor, in which he or she has requested to receive State certification, is subject to mail or telephone audits conducted by a faculty member of the California Specialized Training Institute Hazardous Materials Section or any Office of Emergency Services employee or authorized representative designated by the Chief of the California Specialized Training Institute Hazardous Materials Section. Mail and telephone audits may consist of any of the following:
- (A) Survey of student reactions/evaluations of presentations by an instructor(s) and course content of any certified course.

- (B) Required submission to the California Specialized Training Institute of all instructors' lesson plans/guides, student notebooks, handouts, and any other written materials used in any certified course.
- (3) The auditor shall complete a Course Audit Report (HM 180), as designated in section 2550, for each course audited and provide the California Specialized Training Institute Hazardous Materials Section Chief with a copy of said report for approval within 10 working days following completion of the audit. Upon receiving approval from the Section Chief, the Course Audit Report shall be forwarded to the Course Manager and/or Instructor within 10 working days of approval.
- (4) If any deficiencies were identified in the audit, the auditor shall provide a written summary of deficiencies and recommendations for correcting the identified deficiencies to the California Specialized Training Institute Hazardous Materials Section Chief for approval within 10 working days following completion of the audit. Upon receiving approval from the Section Chief, the written summary of deficiencies and recommendations for correcting the identified deficiencies shall be forwarded to the Course Manager and/or Instructor within 10 working days of approval.
- (A) If the deficiencies are major or willful violations of these regulations and the CSTI Hazardous Materials Section Chief determines that they cannot reasonably be rectified through remedial training, then he/she shall immediately recommend decertification of the instructor as specified in Section 2540(g)(4) of these regulations. Major violations include, but are not limited to, the following:
- (i) Failure to teach a class as specified in the applicable portion of Section 2520.
- (ii) Failure to cover all of the course objectives as specified in the applicable portion of Section 2520.
- (iii) Failure to teach a class meeting the requirement for minimum hours as specified in the applicable portion of Section 2520.
- (iv) Failure to use the curriculum material specified in the applicable portion of Section 2520 and Section 2540(t).
- (v) Violation of Section 2540(e)(3)-(5).
- (vi) Failure to follow the safety policy as specified in Section 2540(k)(1) and 2540(k)(3)-(5).
- (vii) Failure to follow the "Professional Conduct" policy as specified in Section 2540(i).
- (viii) Repeated or willful failure to follow administrative procedures as specified in Section 2540 after having been notified in writing of prior failure to follow those administrative procedures.

- (5) A Course Manager and/or Instructor, who coordinated and/or taught a course that had been identified as being deficient, shall correct all identified deficiencies prior to coordinating or teaching in another certified course.
- (6) Students who have attended a course that had been identified as being deficient shall not be issued certificates until said students have received remedial training in the areas identified as deficient. If the course was identified as being deficient after students have received certificates, the said students shall be notified by CSTI that their certificates are null and void until they receive remedial training in the areas identified as deficient.
- (7) A follow-up audit, reported on a form HM 180 as designated in section 2550, shall be conducted by a faculty member of the California Specialized Training Institute Hazardous Materials Section or any Office of Emergency Services employee or consultant designated by the Chief of the California Specialized Training Institute Hazardous Materials Section to ensure that deficiencies have been corrected.
- (8) Follow-up audit reports shall be submitted to the California Specialized Training Institute Hazardous Materials Section Chief within 10 working days following completion of the follow-up audit.
- (9) The Course Manager is responsible for ensuring that any auditor(s) conducting an audit of said Course Manager's course, in accordance to the procedures established in Section 2540(f), is permitted free and unhindered access to any course requesting State certification. If the Course Manager fails to provide said auditor(s) with free and unhindered access to said course, then said course may not receive State certification.

(g) Instructor Decertification

- (1) A Certified Instructor can be decertified for failure to adhere to the policies, procedures or administrative requirements for delivering, documenting, or certifying a course through the California Hazardous Substances Incident Response Training and Education Program contained in Title 2 of the California Government Code, Division 1, Chapter 7, Sections 8574.19-8574.21 and Title 19 of the California Code of Regulations, Chapter 1, Subchapter 2, Sections 2510-2560.
- (2) A Certified Instructor can be decertified for failure to correct all deficiencies identified in an audit as referenced in Section 2540(f).
- (3) A Certified Instructor can be decertified for failure to teach a minimum of four hours of instruction in any certified course, or any course using certified curriculum, as referenced in Section 2520, during a calendar year. The calendar year in which an instructor received State Certification is exempt from the four-hour requirement. A Certified Instructor who wants credit for teaching hours only, must ensure that the Course Manager, of the course in which the Certified Instructor taught, includes his/her name and hours to be credited on Class Schedule Form (HM 130) that is submitted to the California Specialized Training Institute. If a Certified Instructor wants to notify CSTI of

- a course that he/she is teaching and does not want certification for the course, but wants credit for teaching hours only, then the Certified Instructor shall submit a Training Course Notification Form (HM 100) and a Class Schedule Form (HM 130) to CSTI.
- (4) The CSTI Hazardous Materials Section Chief shall recommend decertification of an instructor to the Director of CSTI. The final decision to decertify an instructor is determined by the Director of the California Specialized Training Institute within 45 calendar days of the recommendation from the CSTI Hazardous Materials Section Chief.
- (5) If the CSTI Hazardous Materials Section Chief recommends decertification of an instructor to the Director of CSTI, then the Section Chief shall, at the same time, cause the instructor being recommended for decertification to be notified by written correspondence outlining the reason(s) for his/her pending decertification. The instructor being recommended for decertification shall be given 30 calendar days (from the date the notification was mailed) to respond in writing to the Director of CSTI for consideration in retaining his/her certification. The Director of CSTI shall review any written correspondence received within the 30-day notification period described above prior to decertifying an instructor.
- (6) During the 30-day notification period, designated in Section 2540(g)(5), the instructor pending decertification shall be permitted to appear before the CSTI Hazardous Materials Section Chief and/or the CSTI Hazardous Material Section Instructor Certification Program Coordinator for the purpose of requesting to retain his/her instructor certification. The instructor pending decertification shall be permitted, at the time of appearance, to present any evidence that would assist in a fair and impartial decision regarding the pending decertification. The CSTI Hazardous Materials Section Chief and/or the CSTI Hazardous Material Section Instructor Certification Program Coordinator shall prepare a written summary of the findings of the interview with the instructor pending decertification, including a recommendation to either maintain or withdraw the decertification request, within 10 days following the interview, to the Director of CSTI. The Director of CSTI shall review any written summary of an interview with an instructor pending decertification prepared by the CSTI Hazardous Materials Section Chief and/or the CSTI Hazardous Material Section Instructor Certification Program Coordinator prior to decertifying an instructor.
- (7) Any instructor who has been notified that he/she is pending decertification, shall be designated as "under suspension" and shall not be permitted to manage, teach or assist in any course requesting State certification. An instructor suspension period shall not exceed 90 days.
- (8) An instructor who has been decertified in accordance with Section 2540(g)(1) or (2) shall not be permitted to manage, assist, or teach in any course requesting State certification.

- (h) Instructor Recertification
- (1) An instructor who was decertified in accordance with Section 2540(g)(3) can be recertified by either of the following methods:
- (A) Successful completion of the Hazardous Materials Instructor Recertification Course as referenced in Section 2520(j); or
- (B) Successful recompletion of the Hazardous Materials Instructor Certification for Trainers Course as referenced in Section 2520(i).
- (2) An instructor who was decertified in accordance with Section 2540(g)(1) or 2540(g)(2) is not eligible for recertification.
- (i) Professional Conduct
- (1) All instructors teaching, coordinating, or monitoring a hazardous materials course as referenced in Section 2520 shall adhere to all of the following professional codes of conduct:
- (A) Refrain from making sexist, racist, or obscene remarks during a certified course.
- (B) Utilize class time for enhancing the learning of students and not for personal motives unrelated to teaching.
- (C) Provide complete and accurate information to the Office of Emergency Services when requested to do so pursuant to Sections 2510-2560.
- (D) Teach only subjects in which the instructor is qualified based on training and experience.
- (E) Provide an honest and accurate representation of instructor's educational background and work experience to students as it relates to the course of instruction.
- (F) Provide an honest and accurate representation of instructor's employment status and instructor relationship with the State.
- (2) Any certified instructor who changes his/her address or phone number shall notify CSTI Hazardous Materials Section of said change within 30 days of change.
- (j) Class Size, Duration, and Attendance
- (1) For any certified course referenced in Section 2520, the Course Manager shall ensure that the Student-to-Instructor ratio does not exceed 40-to-1 for classroom instruction and 15-to-1 for field/exercise instruction.

- (2) No single certified course, as referenced in Section 2520, can be taught over any period exceeding 12 consecutive months without consent from the Chief of the Hazardous Materials Section of the California Specialized Training Institute.
- (3) The Course Manager is required to document and verify student attendance on a daily basis. Verification of student attendance is subject to audit. Course Managers should retain such records for a period of not less than five years.
- (k) Safety Policy
- (1) All Course Managers, certified and noncertified instructors who are conducting or participating in any State certified hazardous materials course, as referenced in Section 2520, shall adhere to all of the following safety procedures:
- (A) The Course Manager shall provide advance notice to prospective trainees regarding any anticipated physical demands and/or physical performance expectations;
- (B) The Course Manager shall provide all instructors participating in their course with a copy of this safety policy;
- (C) The Course Manager shall ensure that emergency communications (telephone or radio) are accessible at all training locations;
- (D) The Course Manager shall ensure that at least one member of the training staff, either directly involved in the training event or immediately available at the training location, shall be trained in CPR and First Aid. For training conducted at a Field Training Facility, the Course Manager shall ensure that at least one member of the training staff, either directly involved in the training event or immediately available at the FTF, shall be a certified EMT-I or greater;
- (E) The Course Manager shall ensure that student emergency notification information, including name and phone number of student's emergency contact, be maintained and easily accessible for the duration of training;
- (F) The Course Manager shall ensure that all instructors participating in the training event are provided with the location and phone number of the nearest medical facility or communication access to the Emergency Medical System (911). Additionally, this information shall be conspicuously posted at all training sites;
- (G) The Course Manager shall be responsible for conducting a safety inspection of all training locations prior to students arrival, reasonably ensuring that no unsafe conditions exist:
- (H) The Course Manager shall be aware of environmental factors such as weather or air quality prior to any outdoor instruction, and shall adjust instruction as necessary;

- (I) The Course Manager shall verbally review specific safety rules with all students and ensure that all students receive a copy of specific safety rules (or ensure that specific safety rules are conspicuously posted);
- (J) The Course Manager shall advise students of their responsibility to stop and report any unsafe action during training immediately upon discovery;
- (K) The Course Manager and all instructors participating in training shall display an attitude of safety and professional demeanor at all times; and
- (L) All instructors shall adhere to this safety policy, and all other specific site safety procedures pertaining to equipment, facilities, and manipulative skills as deemed appropriate by the Course Manager.
- (2) All students who are participating in any State certified hazardous materials course, as referenced in Section 2520, shall adhere to all of the following safety procedures:
- (A) Students shall notify the Course Manager immediately prior to participation in any training of any medical condition which may be aggravated or affect performance during said training;
- (B) In training that requires students to wear an encapsulated suit and/or a self-contained breathing apparatus (SCBA), students shall notify and submit written documentation from a medical doctor or employer that they are fit to wear and work in the environment of an encapsulated suit and SCBA and that the student has no known back injuries that would affect students safety or performance in such training;
- (C) Students shall be required to provide evidence of medical or physical fitness for training, if the Course Manager questions their ability to perform safely;
- (D) Students shall immediately notify a member of the training staff of any injury, however slight, sustained during training;
- (E) Students shall be responsible for stopping and reporting any unsafe action during training immediately upon discovery; and
- (F) Students shall adhere to this safety policy, and all other specific site safety procedures pertaining to equipment, facilities, and manipulative skills as deemed appropriate by the Course Manager.
- (3) All Course Managers, certified and noncertified instructors, and students who are conducting or participating in any State certified hazardous materials course, as referenced in Section 2520, shall adhere to the following Response-To-Injury procedures:
- (A) In the event of an injury, the following actions shall be taken:

- (i) Render first aid as necessary by the designated EMT-I or other staff members or students trained in first aid:
- (ii) Obtain appropriate medical assistance. In all cases where a student loses consciousness, an evaluation shall be sought from a medical doctor before the student is allowed to return to training;
- (iii) Notification by the Course Manager to the CSTI Director or CSTI Hazardous Materials Section Chief shall be made within 24 hours of occurrence for any medical treatment for minor injuries, that occurred during training, sought by the student, or by the Course Manager on behalf of the student. The injured student is required to make notification to CSTI Director or CSTI Hazardous Materials Section Chief if said student obtained medical treatment without Course Manager's knowledge;
- (iv) Immediate notification by the Course Manager to the CSTI Director or CSTI Hazardous Materials Section Chief shall be made if any serious/major injury, life-threatening injury or illness, or death is sustained by a student or instructor during training;
- (v) Notification of lesser injuries not requiring treatment beyond first aid (e.g. minor lacerations, abrasions, strains, etc.) shall be made by the Course Manager in written memo form within 10 working days of the injury, to the CSTI Hazardous Materials Section Chief. The written memo shall include victim's name, home and work address and phone numbers, date and time of injury, description of injury and disposition of treatment, if any; and,
- (vi) Students who sustain any injury that requires treatment by a physician shall obtain a written medical release from a physician and submit it to the Course Manager before being permitted to resume training.
- (4) All Course Managers, certified and noncertified instructors, and students who are conducting or participating in any State certified hazardous materials course, as referenced in Section 2520, that involves chemical monitoring or analysis shall adhere to the following safety procedures:
- (A) Student shall be a minimum of 20 feet away from all chemical demonstrations;
- (B) Students shall be in a well ventilated room not to exceed 85 degrees F or outside not to exceed 100 degrees F;
- (C) All instructors and students shall wear appropriate chemical protective clothing;
- (D) During the handling of chemicals, students shall be monitored according to a student-to-instructor ratio that does not exceed 10-to-1; and

- (E) An EMT-I, or greater, shall be available on-site at all times during the handling of chemicals.
- (5) All Course Managers, certified and noncertified instructors, and students who are conducting or participating in any State certified hazardous materials course, as referenced in Section 2520, that involves an outdoor practical field exercise shall adhere to the following safety procedures:
- (A) Student-to-Instructor ratio shall not exceed 15-to-1;
- (B) Students shall work outdoors in a maximum of 50 minute increments with 10 minute breaks;
- (C) Students shall not be permitted to remain in a Level A or Level B suit for any period of time exceeding 45 consecutive minutes without a break;
- (D) If outdoor temperatures exceed 100 degrees F, student shall take breaks every 30 minutes;
- (E) Adequate drinking water shall be made available to all students and instructors;
- (F) A covered resting/viewing area shall be made available for all students and instructors:
- (G) When students are involved in donning Level A or Level B protective clothing, a back-up student shall assist the student donning the clothing. If the back-up student discovers a problem, he or she shall assist the student in Level A or Level B clothing to a safe position and then immediately notify an instructor;
- (H) A demonstration on proper ladder safety shall be given to all non-fire service personnel prior to any training involving ladders; and
- (I) An EMT-I, or greater, will be available on site at all times during the use of Level A or Level B Protective Clothing and Equipment.
- (l) Certified Course Publication/Marketing Policy
- (1) Unless otherwise noted, all course student notebooks and handout materials issued by the California Specialized Training Institute for the State Certified Hazardous Materials Courses referenced in Section 2520 are public domain and, thereby, not subject to copyright.
- (2) All materials making reference to the Office of Emergency Services and/or California Specialized Training Institute that are to be used to market or seek attendance in a State Certified Hazardous Materials Course shall be forwarded to the California Specialized Training Institute Hazardous Materials Section Chief for approval prior to their use.

(m) Course Prerequisites

- (1) Students shall complete a First Responder Operational Course meeting the minimum content requirements as referenced in Section 2520(b) or an Incident Commander Course meeting the minimum content requirements as referenced in Section 2520(c) prior to being permitted to attend any State Certified Hazardous Materials Technician/Specialist Course as referenced in Section 2520. The Course Manager shall forward a photocopy of said prerequisite course certificate for each student to CSTI with completed Course Roster (HM 150), as referenced in Section 2550(a)(4).
- (2) Students shall complete a First Responder Operational Course meeting the minimum content requirements as referenced in Section 2520(b) or an Incident Commander Course meeting the minimum content requirements as referenced in Section 2520(c) prior to being permitted to attend any State Certified Hazardous Materials Investigations Course as referenced in Section 2520(e). The Course Manager may adopt an equivalent course with prior permission from the CSTI Hazardous Materials Section. The Course Manager shall forward a photocopy of said prerequisite course certificate for each student to CSTI with completed Course Roster (HM 150), as referenced in Section 2550(a)(4).
- (3) Any student seeking to attend a State Certified Hazardous Materials Investigations Course shall provide documentation to the Course Manager that verifies that said student is an active member of an environmental crimes investigation team/unit or participates in the direct support of an environmental crimes investigation team/unit, prior to being permitted to attend any State Certified Hazardous Material Investigations Course as referenced in Section 2520(e). The Course Manager shall forward said documentation for each student to CSTI with completed Course Roster (HM 150), as referenced in Section 2550(a)(4).
- (4) Applicants shall complete a State Certified Hazardous Materials Principles of Environmental Crimes Investigations Course as specified in Section 2520(e) prior to attending any State Certified Hazardous Materials Advanced Environmental Crimes Investigations Course as specified in Section 2520(u).
- (5) Students shall complete First Responder Operations training meeting the minimum content requirements as referenced in Title 8 California Code of Regulations, Section 5192(q) prior to being permitted to attend a State Certified Hazardous Materials Emergency Response First Responder Operations Decontamination Course as referenced in Section 2520(x), or a State Certified Haz Mat Emergency Response-Incident Commander Course meeting the 24 hour minimum class duration requiement as referenced in Section 2520(c)(3), or a State Certified Hazardous Materials Emergency Response Technician--Private Industry Course meeting the 24 hour minimum class duration requirement as referenced in Section 2520(t)(3).
- (n) Required Course Materials and Training Aids

- (1) Course Managers are required to use course materials, text books, reference books, videos, equipment and training aids that are designated in Section 2520 for specific State certified hazardous materials courses.
- (2) Any Course Manager who seeks to substitute other materials, text books, reference books, videos, equipment or training aids in place of those specified in Section 2520, shall submit a written request with a copy of the material(s) to be considered, to the California Specialized Training Institute Hazardous Materials Section Chief for approval prior to use in any certified course.
- (o) Technician and Specialist Designation
- (1) Any student who has successfully completed all of the Hazardous Materials Technician/Specialist Courses as referenced in Section 2520(k)-(q) shall be recognized as having been trained as a certified Hazardous Materials Specialist by the State of California.
- (2) Any student who has successfully completed all of the Hazardous Materials Technician/Specialist Courses as referenced in Section 2520(k)-(n) shall be recognized as having been trained as a certified hazardous Materials Technician by the State of California.
- (3) Any Student who seeks to challenge the Technician/Specialist 1A Course, as referenced in Section 2520(k), shall be permitted to take the Technician/Specialist 1A Final Exam only once, as administered by a CSTI Hazardous Materials Section faculty member or designated certified instructor. If said student successfully passes said exam, the student shall be certified as completing the Technician/Specialist 1A Course, as referenced in Section 2520(k). The regular tuition fee may be charged to the student prior to administering the Technician/Specialist 1A Final Exam.
- (p) California Code of Regulations Acknowledgment Receipt
- (1) Prior to managing, instructing, or assisting in any course requesting State certification, all certified instructors are required to complete, sign and submit to CSTI, the California Code of Regulations Acknowledgment Receipt Form (HM 200) as referenced in Section 2550.
- (2) All certified instructors are responsible for obtaining, reviewing, and complying with all published revisions to these regulations, as designated in Title 19 California Code of Regulations, Division 2, Chapter 1, Subchapter 2, Sections 2510-2560 entitled Hazardous Substances Emergency Response Training.
- (q) Specialist Evaluation
- (1) The Haz Mat Specialist Evaluation Record (HM 230), as referenced in Section 2550(a)(10), shall only be completed by the Specialist 1G Course Manager or

instructor(s) assisting the Course Manager, under the director supervision of said Course Manager.

- (2) Instructors who complete the Haz Mat Specialist Evaluation Record (HM 230) shall accurately and objectively evaluate the student's performance based on the certified curriculum as referenced in Section 2520.
- (3) Instructors who complete the Haz Mat Specialist Evaluation Record (HM 230) shall complete the "comment section" whenever a student receives a performance grade of "3" (Outstanding) or "O" (Failure).
- (4) The Specialist 1G Course Manager is responsible for reviewing and ensuring that the Haz Mat Specialist Evaluation Record (HM 230) is accurate, objective, and contains all required comments.
- (5) The Specialist 1G Course Manager is responsible for assigning the final score for all students in his/her course.
- (6) A student shall not receive certification in the Specialist 1G Course, as referenced in Section 2520(q), unless he or she receives a score of "1" (Average) or better in each of the five position categories.
- (r) Condensed Courses
- (1) The Office of Emergency Services will not certify condensed courses after June 30, 1999.
- (s) Refresher Courses
- (1) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the First Responder Awareness Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the First Responder Awareness Course or a First Responder Awareness course meeting the content requirements referenced in Section 2520(a);
- (B) Student completes the CSTI First Responder Awareness Level Refresher Diagnostic Quiz or a First Responder Awareness level diagnostic quiz approved by student's employer which contains a minimum of 20 questions;
- (C) Student actively participates in a review of the diagnostic quiz with a certified instructor:
- (D) Student demonstrates basic First Responder Awareness level competencies, as referenced in Section 2520(a)(1), during the CSTI First Responder Awareness Level

Refresher Tabletop Exercise or a First Responder Awareness level refresher exercise developed and approved by student's employer; and,

- (E) Student successfully completes the CSTI Certified First Responder Awareness Level written exam with a score of 70% or above.
- (2) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the First Responder Operational Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the First Responder Operational Course or a First Responder Operational course meeting the content requirements referenced in Section 2520(b);
- (B) Student completes the CSTI First Responder Operational Level Refresher Diagnostic Quiz or a First Responder Operational level diagnostic quiz approved by student's employer which contains a minimum of 40 questions;
- (C) Student actively participates in a review of the diagnostic quiz with a certified instructor;
- (D) Student demonstrates basic First Responder Operational level competencies, as referenced in Section 2520(b)(1), during the CSTI First Responder Operational Level Refresher Tabletop Exercise or a First Responder Operational level refresher exercise developed and approved by student's employer; and
- (E) Student successfully completes the CSTI Certified First Responder Operational Level written exam with a score of 70% or above.
- (3) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the Hazardous Materials Emergency Response Incident Commander Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the Hazardous Materials Emergency Response Incident Commander Course meeting the content requirements referenced in Section 2520(c);
- (B) Student actively participates in a review of the legal requirements for Incident Commanders as specified in Title 8 California Code of Regulations Section 5192(q);
- (C) Student demonstrates basic Incident Commander level competencies, as referenced in Section 2520(c)(1), during the CSTI Incident Commander Level Refresher Tabletop Exercise or an Incident Commander level refresher exercise developed and approved by student's employer; and

- (D) Student successfully completes the CSTI Incident Commander Level written exam with a score of 70% or above.
- (4) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the Hazardous Materials Emergency Response Technician--Private Industry Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the Hazardous Materials Emergency Response Technician--Private Industry Course meeting the content requirements referenced in Section 2520(t);
- (B) Student actively participants in the 8 hour California Specialized Training Institute's refresher course for the Hazardous Materials Emergency Response Technician--Private Industry Course.
- (C) Student actively participates in a review of the training requirements for Hazardous Materials Emergency Response Technician--Private Industry as specified in Title 8 California Code of Regulations Section 5192(q);
- (D) Student actively participates in an activity requiring them to complete a practical exercise while wearing a level of chemical protective clothing appropriate to that worksite;
- (E) Student demonstrates basic competency of Hazardous Materials Emergency Response Technician--Private Industry level objectives, as referenced in Section 2520(t)(1), during the CSTI Hazardous Materials Emergency Response Technician--Private Industry Refresher Course field training exercise; and
- (F) Student successfully completes the CSTI Hazardous Materials Emergency Response Technician--Private Industry Refresher Course written examination with a score of 70% or better.
- (5) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the Hazardous Materials Technician/Specialist Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the Hazardous Materials Technician/Specialist Course meeting the content requirements referenced in Section 2520(k thru q);
- (B) Student actively participates in the 24 hour California Specialized Training Institute's Hazardous Materials Technician/Specialist Refresher Course.

- (C) Student actively participates in a review of the training requirements for Hazardous Materials Technician/Specialist as specified in Title 8 California Code of Regulations Section 5192(q);
- (D) Student actively participates in an activity requiring them to complete a practical exercise while wearing Level A chemical protective clothing;
- (E) Student demonstrates basic competency of Hazardous Materials Technician/Specialist level objectives, as referenced in Section 2520(k thru q)(1), during the CSTI Hazardous Materials Technician/Specialist Refresher Course field training exercise; and
- (F) Student successfully completes the CSTI Hazardous Materials Technician/Specialist Refresher Course written examination with a score of 70% or better.
- (6) The California Specialized Training Institute shall issue a student a Certificate of Completion in Refresher Training for the Hazardous Waste General Site Worker Course if all of the following conditions are met:
- (A) Student presents to the Course Manager a valid certificate of completion issued by the California Specialized Training Institute for the Hazardous Waste General Site Worker Course meeting the content requirements referenced in Section 2520(s);
- (B) Student actively participates in the 8 hour California Specialized Training Institute's refresher course for the Hazardous Waste General Site Worker Course.
- (C) Student actively participates in a review of the training requirements for Hazardous Waste General Site Worker as specified in Title 8 California Code of Regulations Section 5192(e);
- (D) Student actively participates in an activity requiring them to complete a practical exercise while wearing a level of chemical protective clothing appropriate to that worksite;
- (E) Student demonstrates basic competency of Hazardous Waste General Site Worker level objectives, as referenced in Section 2520(s)(1), during the CSTI Hazardous Waste General Site Worker Refresher Course field training exercise or a Hazardous Waste General Site Worker level refresher exercise developed and approved by student's employer; and
- (F) Student successfully completes the CSTI Hazardous Waste General Site Worker Refresher Course written examination with a score of 70% or better.
- (7) All administrative procedures, as referenced in Section 2540, shall apply to all refresher courses.

- (8) Course Managers seeking to teach any of the refresher courses referenced above shall indicate on the Training Notification Form (HM 100), as referenced in Section 2550, that said course will be in the refresher format.
- (9) Course Managers who have completed teaching any of the refresher courses referenced above shall submit to CSTI with the Course Roster Form (HM 150), as referenced in Section 2550, a photocopy of the certificate of the prerequisite course for each student as designated in Section 2540(t)(1)(A) or Section 2540(t)(2)(A).
- (10) The Course Manager for the First Responder Awareness Refresher Course shall be a certified First Responder Awareness or Operations Instructor as referenced in Section 2530(a).
- (11) The Course Manager for the First Responder Operations Refresher Course shall be a certified First Responder Operations or Incident Commander Instructor as referenced in Section 2530(a).
- (12) The Course Manager for the Emergency Response Incident Commander Refresher Course shall be a certified Incident Commander Instructor as referenced in Section 2530(a).
- (13) The Course Manager for the Hazardous Materials Emergency Response Technician-Private Industry Refresher Course shall be a certified California State Certified Hazardous Materials Technician/Specialist 1C and 1D or 1F and 1G or Hazardous Materials Emergency Response Technician--Private Industry Instructor as referenced in Section 2530(b). The course manager for a Hazardous Waste General Site Worker Refresher Course shall be a certified California State Certified Hazardous Waste General Site Worker Instructor.
- (t) Certified Curriculum
- (1) Certified curriculum for the California Hazardous Substances Incident Response Training and Education Program shall consist of Instructor Guides and/or Student Notebooks, effective publication dates July 1, 1998, as listed below. Course managers shall ensure that certified classes use the current edition of the documents listed for the applicable course. These documents are incorporated by reference in their entirety into these regulations for the courses described in Section 2520.

Hazardous Materials Emergency Response: First Responder Awareness Student Notebook

Hazardous Materials Emergency Response: First Responder Awareness Instructor Guide

Hazardous Materials Emergency Response: First Responder Operations Student Notebook

Hazardous Materials Emergency Response: First Responder Operations Instructor Guide

Hazardous Materials Emergency Response: Incident Commander Student Notebook

Hazardous Materials Emergency Response: Incident Commander Instructor Guide

Hazardous Materials Emergency Response: Executive Management Student Notebook.

Hazardous Materials Emergency Response: Principles of Environmental Crimes Investigations Student Notebook

Hazardous Materials Emergency Response: Environmental Monitoring Student Notebook

Hazardous Materials Emergency Response: Incident at Ports Student Notebook

Hazardous Materials Emergency Response: Instructor Certification Student Notebook

Hazardous Materials Emergency Response: Inst. Cert. for Trainers Student Notebook

Hazardous Materials Emergency Response: Instructor Recertification Student Notebook

Hazardous Materials Emergency Response: Tech/Specialist (1A): Basic Chemistry Student Notebook

Hazardous Materials Emergency Response: Tech/Specialist (1A): Basic Chemistry Instructor Guide

Hazardous Materials Emergency Response: Tech/Specialist (1B): Applied Chemistry Student Notebook

Hazardous Materials Emergency Response: Tech/Specialist (1B): Applied Chemistry Instructor Guide

Hazardous Materials Emergency Response: Tech/Specialist (1C): Incident Considerations Student Notebook

Hazardous Materials Emergency Response: Tech/Specialist (1C): Incident Considerations Instructor Guide

Hazardous Materials Emergency Response: Tech/Specialist (1D): Tactical Field Operations Student Notebook

Hazardous Materials Emergency Response: Tech/Specialist (1D): Tactical Field Operations Instructor Guide

Hazardous Materials Emergency Response Specialist (1F): Specialized Mitigation Techniques Student Notebook

Hazardous Materials Emergency Response Specialist (1F): Specialized Mitigation Techniques Instructor Guide

Hazardous Materials Emergency Response Specialist (1G): Tactical Field Operations Instructor Guide

Hazardous Materials Emergency Response Tech/Spec: Instructor Orientation Student Notebook

Hazardous Materials Emergency Response Technician--Private Industry Student Notebook

Hazardous Materials Emergency Response Technician--Private Industry Instructor Guide

Hazardous Materials Emergency Response Technician--Private Industry (24 Hour) Student Notebook

Hazardous Materials Emergency Response Technician--Private Industry (24 Hour) Instructor Guide

Hazardous Materials Emergency Response Advanced Environmental Crimes Investigations Student Notebook

Hazardous Materials Emergency Response Emergency Medical Response to Hazardous Materials Incidents Student Notebook

Hazardous Materials Emergency Response Emergency Medical Response to Hazardous Materials Incidents Instructor Guide

Hazardous Materials Emergency Response Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Student Notebook

Hazardous Materials Emergency Response Guidelines for Hospitals and Emergency Departments: Managing the Victims of Hazardous Materials Incidents Instructor Guide

Hazardous Materials Emergency Response First Responder Operations - Decontamination Student Notebook

Hazardous Materials Emergency Response First Responder Operations - Decontamination Instructor Guide

Hazardous Waste General Site Worker Student Notebook

Hazardous Waste General Site Worker Instructor Guide

Authority cited: Section 8574.20(a), Government Code. Reference: Hazardous Substances Emergency Response Training, Section 8574.20(b), Government Code.

HISTORY

- 1. New section filed 7-8-91; operative 8-7-91 (Register 91, No. 46).
- 2. New subsections (g), (h) and (i) filed 9-16-91; operative 10-16-91 (Register 92, No. 2).

 3. Amendment filed 5-12-94; operative 6-13-94 (Register 94, No. 19).

- Editorial correction (Register 96, No. 52).
 Amendment of section and Note filed 12-23-96; operative 1-22-97 (Register 96, No. 52).
- 6. Amendment of section and new forms filed 10-15-98; operative 11-14-98 (Register 98, No. 42).

SITE SAFETY AN CONTROL PLAN ICS 208 HM		I. lucido	ant Nac	nc:		2. Date Prepared:			3. Operational Period: Time:						
_				Sec	lion I.	Site Inform	ation								
4. Incident Lanation:	•														
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5. Incident Commander: 6			6. H.	Section II. Organization 6. H.M Group Supervisor:						7. Tech. Specialist - HM Reference:					
			or in company and						· ·						
8. Safety Officer:			9. Entry Leader:						10. Site Access Control Leader:						
11. Asst. Safety Officer - HM:			12. Decontamination Leader:						13. Safe Refuge Area Mgr.:						
14. Environmental Health:			15.						16.						
17. Entry Team: (Buddy System) Name:				PPE Lev	/el	18. Decontumination Eleme Name:									
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Entry 2			lacksquare			Decon 2									
Entry 3			├			Decon 3									
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22. Toxicity/PPM Instrument(s):					23. Radiological Instrument(s):										
Comment:						•				_					
			Se	ction V.	Deco	ntamination	Procesi	lures							
E4. Standard Decompanion Procedures:										YBS:		NO:			
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				Section	VI. S	ite Cummus	ication	18.							
25. Command Frequency:			26. 1	actical F	тецие	mcy:			27. Entry Frequency						
28. Medical Monitoring	₁	YES:	Section VII, Medical Assist NO: 29, Medical Treatment a					France	ansport la-piace: YES: NO:						
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	Comment:				
Section XI. Emergency Procedures		Section XI. Emergency	Procedures		
33. Emergency Procedures:	33. Emergency Procedures:				
Section XII. Safety Briefing					
34. Assi, Safety Officer - HM Signature: Safety Briefing Completed (Time):		Section XII. Salicty E			
35. IIM Group Supervisor Signature: 36. Incident Commander Signature:	34. Assi. Safety Officer - HM Signature			ted (Time):	

ICS 208 HM 3/98 Page 2

INSTRUCTIONS FOR COMPLETING THE SITE SAFETY AND CONTROL PLAN ICS 208 HM

A Site Safety and Control Plan must be completed by the Hazardous Materials Group Supervisor and reviewed by all within the Hazardous Materials Group prior to operations commencing within the Exclusion Zone.

Item NumberItem TitleInstructions

- 1. Incident Name/Number Print name and/or incident number.
- 2. Date and Time Enter date and time prepared.
- 3. Operational Period Enter the time interval for which the form applies.
- 4. Incident Location Enter the address and or map coordinates of the incident.
- 5 16. Organization Enter names of all individuals assigned to ICS positions. (Entries 5 & 8 mandatory). Use Boxes 15 and 16 for other functions: i.e. Medical Monitoring.
- 17 18. Entry Team/Decon Enter names and level of PPE of Entry & Decon personnel. (Entries 1 4 mandatory buddy system Element and back-up.)
- 19. Material Enter names and pertinent information of all known chemical products. Enter "UNK" if material is not known. Include any which apply to chemical properties. (Definitions: ph = Potential for Hydrogen (Corrosivity), IDLH = Immediately Dangerous to Life and Health, F.P. = Flash Point, I.T. = Ignition Temperature, V.P. = Vapor Pressure, V.D. = Vapor Density, S.G. = Specific Gravity, LEL = Lower Explosive Limit, UEL = Upper Explosive Limit)
- 20 23. Hazard Monitoring List the instruments which will be used to monitor for chemical.
- 24. Decontamination Check "NO" if modifications are made to standard decontamination procedures and make Procedures appropriate Comments including type of solutions.
- 25 27. Site Communications Enter the radio frequency(ies) which apply.
- 28 29. Medical Assistance Enter comments if "NO" is checked.
- 30. Site Map Sketch or attach a site map which defines all locations and layouts of operational zones. (Check boxes are mandatory to be identified.)
- 31. Entry Objectives List all objectives to be performed by the Entry Team in the Exclusion Zone and any parameters which will alter or stop entry operations.
- 32 33. SOP's, Safe Work List in Comments if any modifications to SOP's and any emergency procedures which will be Practices, and affected if an emergency occurs while personnel are within the Exclusion Zone.

Emergency Procedures

34 - 36. Safety Briefing Have the appropriate individual place their signature in the box once the Site Safety and Control Plan is reviewed.

Note the time in box 34 when the safety briefing has been completed.

ICS 208 HM Instructions - 3/98

§ 2550. Administrative Forms.

- (a) The following forms shall be utilized in the administration of the California Hazardous Substances Incident Response Training and Education Program as designated in section 2540:
- (1) Training Course Notification Form (HM 100);
- (2) Class Schedule Form (HM 130);
- (3) Student Course Evaluation Form (HM 140);
- (4) Course Roster Form (HM 150);
- (5) Course Manager Course Evaluation Form (HM 160);
- (6) Course Audit Report Form (HM 180);

- (7) FTF Inspection Report Form (HM 190);
- (8) CCR Acknowledgment Receipt Form (HM 200);
- (9) Teaching Verification Form (HM 220);
- (10) Haz Mat Specialist Evaluation Record (HM 230); and
- (11) CSTI Application Form

HAZARDOUS MATERIALS TRAINING COURSE NOTIFICATION

1.	Course Number (leave blank):	
FI FI	Course Type: Tech./Spec: CA FRA Refresher IA IE FRO Decon RO FRO Refresher IB IF Medical Mgmt. /SM FRO Condensed IC IG Other. (Title) vest. IC/SM Condensed ID	
3.	Course Dates:	
4.	Course Time:	
5.	Course Address (number/street, city, zip):	
6.	Course Manager's (Lead Instructor) Name:	
7.	Course Manager's (Lead Instructor) Certificate Number:	
8.	Course Manager's Mailing Address:	
9.	Course Manager's Phone Number.	
10.	Which exam will you be using? Year: A B C	
11.	Adjunct Instructors Names and Certificate Numbers:	
the Sta mance	urse notification to CSTI constitutes an agreement between the above-indicated Course Manager and (e of California to conduct the above-indicated course in accordance with the minimum hours, perfor objectives, course content, and procedures designated in Title 19, California Code of Regulations. r 1, SubChapter 2, Sections 2510-2560.	
fax it.	ay call this information into Outreach Coordinator, or fill out this form and mail it o Please submit all information to CSTI 6 weeks prior to class. Address and phone are are listed below:	r
	ling this form please mail to: CSTI, Attn: Outreach Coordinator, P.O. Box 8104, San Luc , CA 93403-8104. Phone: 805/549-3534. FAX: 805/549-3555.	s
indicat	urse Manager is required to submit to CSII, no later than 6 weeks following completion of above ed course, the following materials: 1) Course Roster Form (HM150), 2) Student Evaluation HM140), 3) Course Manager Evaluation Form (HM160) (Optional), 4) Course Schedule (HM13)
For CS	Ti Use Only: Notification Received: Materials Shipped: Course Status: Open Ongoing Closed	
Staten	California-OES/CSD Revised 9/93 Form HM100	

2550 (=) 2 CSTI HAZARDOUS MATERIALS CLASS SCHEDULE

COURSE TITLE:				
DATES:			Course Number	
COURSE MANAGER:				
DAY/TIME	SUBJECTAREA	CORRESPONDING CSTI TAB	INSTRUCTOR	HPS. TO BE CREDITED
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		Course Manager Signatu	120	
State of California OPS/CST	Rest	sed 8/93		Form HM130

HAZARDOUS MATERIALS COURSE STUDENT EVALUATION FORM (One Evaluation Required Per Participant)

I.	Your Agency (Optional):	
IJ.	Your Name (Optional):	
M.	Course Title:	
IV.	Course Date:	
v.	CSTI Class Number:	
VI.	Course Manager:	
VII.	Were stated Course Objectives Met: YES NO	
Based cated	on the CSTI course you have just taken, and using the rating scale of 1 to t below, please rate the current QUALITY of:	s as indi-
	1 = Inadequate 2 = Needs Improvement 3 = Satisfactory 4 = Good 5 =	Excellent
t.	Effectiveness of Instructor's presentation style and communication techniques.	
2.	Instructors concern for his/her participants.	_
3.	Instructors level of knowledge.	
4.	Effectiveness of instructors teaching ability/skills.	
5.	Effectiveness and proper use of visual aids.	
6.	Effectiveness and proper use of reference materials.	
7.	Effectiveness and proper use of training aids (props).	
8.	Effectiveness and appropriateness of the CSTI certified exam.	
9.	Level of difficulty of CSTI certified exam.	
10.	Course content (thorough - realistic).	
11.	Application (enough "hands-on" training).	
12.	Time management.	
13.	Motivation level of other participants.	

OVER

in my opinion	n, the MOST BENEFICIAL block of instruction was:
in my opinion	, the LEAST BENEFICIAL block of instruction was:
in my opinion	n, the #1 TOPIC for this course to address in the future is:
	t, the #1 TRAINING SERVICE CSTI could provide in the future is
	BENEFITED ME DID NOT BENEFIT ME because:
	of the page to share any other comments or suggestions the
p us improve	and refine CSTI courses/service in the future.

State of California-OES/CSTI

Revised 8/93

Form HM140

CSTI HAZARDOUS MATERIALS COURSE ROSTER

PLEASE TYPE OR PRINT LEGIBLY

Course Title:		_	
Course Date:		_	
CSTI Class Number: _			
Course Manager:		-	<u>issued</u> By CST1
NAME/SSN	ADDRESS / PHONE	PASSED Y/N	% SCORE CERT.
Nagge	· · ·		
Sen		┤ '	
Name			
SSN		[
Name			
SSN	-		
Name			
SSN			
Name			
SSN		_	
Name			
SSN		_	
Name			
SSN			
Name			
SSN	-	_	
Name			
SSN			

COURSE MANAGER:

(Signature)

I Certify that this course was conducted in accordance with minimum hours, performance objectives, outlines and procedures identified by CSTI pursuant to California Code of Regulations, Section 2520.

State of California-OES/CSTI

Revised 3/93

Form BM150

HAZARDOUS MATERIALS COURSE MANAGER EVALUATION

Cou	rse Title: rse Date: I Class Number:	promary	- -
Cour	rse Manager:		•
COU	RSE ASSESSMENT		
1.	MATERIALS: Technically accurate "Up to date "Well organized "Easy to use "Complete	COMMENTS:	
2.	AUDIOVISUALS: "Type "Ittles "Quality	COMMENTS:	
3.	COURSE: *Relevant *Facilitated learning *Lectures/activities were appropriate *Right amount of material *Appropriate for participants *Effective		
4.	PARTICIPANTS: "Motivated "Manageable "Precourse information	COMMENTS:	
5.	FACILITIES: *Conductive to learning *AV equipment available	COMMENTS:	
6.	Was the course delivered as designed?	f not, why?	·
7.	Do you feel that the course mei its object	tives? If not, why?	
8.	Did you train all sessions of the course?	If not, why?	
Pleas	se use the following lines for comments:	and suggestions:	
State	of California-OBS/CSFI Revi	sed 8/93	Form HM160

COURSE AUDIT REPORT:

<u>Directions:</u> Auditor completes all pages of this report. Auditor must also attach a copy of the appropriate subsection within Section 2520 of the California Code of Regulations, that corresponds to the type of course being audited (eg. First Responder Awareness, First Responder Operational, Incident Commander, etc.). The auditor is required to utilize the regulation subsection as a checklist and place his/her initials next to each topic in which the course is in compliance. Lack of initials next to topic will indicate a deficiency in the course being audited. All deficiencies should be addressed in the comment section.

Course Title:	
Course Date(s):	
Course Location:	
Course Manager:	
Course Manager's Instructor Number:	
Course Manager's Mailing Address:	
Course Manager's Phone Number:	
Presenting Agency/Organization:	
Instructor(s):	Blocks:
Type of Audit: RoutineSpecia	

State of California-OES/CSTI

Revised 11/2/93

Form HM 180

Page 1

Summary of Findings & Comments:

* *

use additional paper if necessary
F-F
Date:
_

State of California-OES/CSTI

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Form HM 180

Page 2

Audit Checklist:

<u>Directions:</u> Auditor completes this checklist by putting his/her initials in the appropriate column for each Item indicated. Any discrepancies, significant observations, or standards not in compliance should be explained in the "Summary of Findings & Comments" section above.

Standard: In Compilance: Not Observed:
YES NO

COURSE MANAGER & INSTRUCTORS

- Course Manager was on-site monitoring, coordinating, and/or instructing in course.
- Course Manager taught at least 20% of course, (only applicable to audits of entire course)
- Noncertified Instructors were teaching under the supervision of the Course Manager.
- Professional conduct, as specified in CCR Section 2540(i) was demonstrated by all instructors.

COURSE ADMINISTRATION & SAFETY

- Classroom Student-to-Instructor Ratio did not exceed 40-to-1.
- Field/Exercise Student-to-Instructor Ratio did not exceed 15-to-1.
- Course Manager had a system in piece to document & verify all student attendance.
- Safety Policy was adhered to by all instructors, as specified in CCR Section 2540(k), as applicable.

COURSE MATERIALS

- Each student was provided a copy of the cartified curriculum (student notebook),
- Each student was provided with a Course Evaluation Form HM 130.
 (only applicable to audite of entire course)

-- continued --

State of California-DES/CSTI Revised 11/2/98 Form HM 180 Page 3

--continued --

Standard:

in Compliance:

Not Observed:

YES

NO

 All reference books, videos, training aids, text books, and equipment as specified in CCR 2520 for the appropriate level of training were on-site and available to students.

COURSE CONTENT & HOURS

- All blocks of instruction that were audited contained all of the required content as specified in CCR 2520 for the appropriate level of training.
- Course met or exceeded minimum required hours as specified in CCR 2520 for the appropriate level of training.
 (only applicable to audits of entire course)

EXERCISES

- Table Top and/or Field Exercise(s) met all objectives specified in CCR Section 2520 for the appropriate level of training.
- Proper equipment and materials were available during the exercise.

EXAMS

- The Course Manager administered the "current" cardfled final exam at the end of course.
- 17. Certified exams were administered, proctored, corrected and scored by the Course Manager. (note: exeistance from other "certified" instructors is permitted)
- The proper time limit was achiered to for the administration of certified final exam, (one minute per question unless otherwise indicated on exam)
- Students were not permitted to retain any certified final exams.
- No questions and/or answers to the certified exam were revealed to students prior to administration of certified final exam.

State of California-OES/CSTI

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Form HM 180

Page 4

2550 (a) (7)

FIELD TRAINING FACILITY INSPECTION REPORT:

<u>Directions:</u> Inspector completes this report and forwards it to the CSTI Hazardous Materials Section Chief within 10 working days from date of inspection. <u>All</u> items must be present and operational at time of inspection in order for the facility to be certified. Field Training Facility Inspection and Certification Procedures are found in Title 19, California Code of Regulations, Chapter 1, Sub-Chapter 2, Sections 2560. Authority to conduct inspection is found in Title 2, California Government Code, Division 1, Chapter 7, Article 3.8, Section 8574.

Inspection Date:	
Location:	
Presenting Agency/Organization:	
FTF Coordinator's Name:	Title:
FTF Coordinator's Address:	· · · · · · · · · · · · · · · · · · ·
FTF Coordinator's Phone:	
Inspector's Signature:	Date:
Inspector's Name:	
Inspector's Signature:	Date:
Inspector's Name:	Title:
	(CSTI Haz. Mat. Section Chief Signature)
	NOT APPROVED
	(CSFM Representative Signature)
APPROVED	NOT APPROVED

State of California-OES/CSTI

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Form HM 190 Page 1

TRAINING AIDS:

State of California-OES/CSTI

Drums that have been designed with leaks of the following types:
_One Side Void (eg. fork lift or nail puncture)One Bottom Failure (bottom of drum cut free so that drum fails if moved)One Bung Leak (damaged threads)One Chine Leak (1/16 holes or saw cut).
_Drums for sampling:
One 17 E with threaded bung, 55 gal. One 17 H with removable top, 55 gal. One non-operable (weld or braze bungs closed).
Overpack:
_One DOT 49 CFR 173.3 Salvage Drum, 85 gal. _One DOT 49 CFR 173.3 Salvage Drum, 8 gal. _One DOT 49 CFR 173.3 Salvage Drum, Polyethylene,
_Onc 100-150 lb. Chlorine Container designed for vapor leak from the valve area.
_One 1-Ton Chiorine Container designed for liquid and vapor leaks from valve and fusible plug. Container shall be designed to allow instructor to change leak from a liquid to a vapor when students roll the container.
One Chlorine Tank Dome designed for liquid line, vapor line and safety relict valve leak. One leak should be from vibration opening of valve, one leak from a valve loose in its mount, and one leak from a failed safety-relief valve. The tank dome shall be designed to allow the student to read the vapor pressure via one of the vapor lines.
_One Fixed Bulk Storage Tank (minimum of 200-gallon capacity) with leaks of a type to facilitate the application of a tank bandage.
_One MC 306/MC 406 type Tenk Truck designed to simulate leak from dome cover on overturned tanker. Tanker must be of sufficient size to allow drilling for stinger operations.

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Form HM 190 Page 2

_One Railroad Tank Car with domes listed below or Domes listed below or simulated Railroad Tank Car. All work shall be done on a platform that is nearly than 64 square feet and at least 10 feet above ground level:	1 a 0
 One Chlorine Dome meeting requirements specified above; One Pressure Dome designed to leak from liquid valve, vapor valve, an failed Safety-Relief Valve. The dome shall be designed to allow student to gauge the liquid level in the tank One General Service Dome designed to leak from Liquid Valve 	ıd ats
_One Storm Drain designed to allow water flow from an out fall line for students to construct an under flow dam to contain hazardous materials.	
One Piping System designed to leak liquid or vapor on 2-12-inch or large pipes including the following:	er
Valve, Flange, Weld, and Thread Failures. Cracked Pipe. Sheared Pipe.	
Pressure Vessels designed to leak from a valve or valve area including the following:	e
One 100-150 lb container. One 1-Ton Container meeting the requirements specified above. Two Pressurized Gas Cylinders (eg. Fumigants, Acetylene, Oxygen).	
_One Cargo Box Trailer or Intermodal Container to be used to simulate a traffic accident with mixed cargo involved.	
EQUIPMENT:	
Drum-related:	
Plug and DikeBung Wrench,Foam WedgesWater DyeEpoxy PuttyGrounding and BondingNew BungsSpeed Wrench and SocketDrum Repair KitDrum Hand TruckTransfer PumpRedwood PlugsDrum Lifter.	
Provide No. 10 CERCENT CO. D. C.	•

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_Chlorine-related:
_A KitB KitC KitAmmonia Atomizer Bottle.
_Powdered Materials-related:
Shovels Brooms Plastic Bags Tarps.
Pressurized Gas Cylinders-related:
Hand Tools. Valve Thread Cap.
Fixed Storage Tank-related:
Patching Kits. Pneumatic Patching Equipment. 5-Minute Marine Epoxy.
Piping Leaks-related:
Pneumatic Patching Equipment. Patching Kits. Flange Gaskets. Bolts and Nuts. Hand Tools.
_Cargo Tank-related:
Dome Clamp (MC 306/406)Step LadderPneumatic Drill,Grounding and bonding cablesGrounding rodStinger,4" Hole saw drill bitAir pressure regulator.

State of California-OES/CSTI Revised 11/2/93 Form HM 190

Page 4

Raliroad Tank Car-related:
Hand ToolsPneumatic Tank Patching EquipmentLadders (Fire Service Type), minimum 14 ftTool Elevator (rope, bag or bucket, and pulleys).
_Storm Drain-related:
_ShovelsSheet PlasticWheelbarrowsSandOver/Under flow Pipes {3-8 inches diameter)Pneumatic Plugs.
_Absorbents: Polar and Nonpolar
Pads. Booms. Pillows. Granular.
_Sampling-related:
Colawasa TubeScoopsPipettesSoil Sample AugerPlastic ZipLoc-type BagsDrum Thief'sSpoonsBottles with Seals and Labels1-gallon Paint Cans for Overpack.
_Monitoring-related:
CGIOxygen MeterPhotoinization DetectorDosimetersRadiation Meters Mr/hr and R/hr,Colormetric TubesField Chemical ID KitTest Papers.

State of California-OES/CSTI

Revised 11/2/93

Form HM 190 Page 5

_Decontamination-related:
Four Containment PoolsFour Water WandsTwo Hudson-Type Garden SprayersWash TubsTrash Bags (55-gallon type)Four Garden Hoses or EquivalentTarpsBrush AssortmentSpongesTowels.
_Other:
Windsock.
REFERENCE MATERIALS:
_Chemical Dictionary (Hawley's).
_Guidelines for the Selection of Chemical Protective Clothing (ACGIH).
_Handbook Of Reactive Chemical Hazards (L. Bretherick).
CHRIS Manual (U.S. Coast Guard).
Merck Index.
_Dangerous Properties of Industrial Materials (SAX).
_Farm Chemical Handbook (Meister).
_Pocket Guide to Chemical Hazards (NIOSH).
Fire Protection Guide on Hazardous Materials (NFPA).
California Haz Mat Incident Contingency Plan.

State of California-OES/CSTI Revised 11/2/93 Form HM 190 Page 6

PROTECTIVE CLOTHING:

_Level A Suits (Adequate supply to assure that no suit is worn twice without first being cleaned and disinfected. Suit must provide total encapsulation.).
_Level B Suits (one per student).
Level C Suits (one per student).
_Chemical Resistant Boots (one pair per student).
_Chemical Resistant Gloves (one pair per student).
_Eye Protection (Goggles and Safety Glasses, one pair per student).
_Hearing Protection (one set per student).
Full Face Air Purifying Respirators (one per student).
_Self-Contained Breathing Apparatus Mask (one per student).
Self-Contained Breathing Apparatus (one per every two students).
_Flash Protection Over Suit (one).
_Cryogenic Over Suit (one).
FORMS:
_ICS Form 201 - Incident Briefing.
_ICS Form 202 - Incident Objectives.
_ICS Form 205 - Incident Radio Communications Plan.
_ICS Form 214 - Unit Log.
California State Haz Mat Incident Report Form

State of Cattornia-OES/CSTI

Revised 5/11/94

Form HM 190 Page 7

__First Aid Kit (EMT-1 type). __Emergency Telephone or Radio (to summon a paramedic). __Covered Observation Area (sufficient capacity to seat entire class and able to provide protection from rain and sun). __Fiashlights (one per two students). __Emergency Night Lighting (sufficient to illuminate entire exercise area). MISC. / OPTIONAL ITEMS NOTED:

State of California-DES/CSTI Revised 11/2/93 Form HM 190

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OFFICE OF EMERGENCY SERVICES CALIFORNIA SPECIALIZED TRAINING INSTITUTE

Title 19
CALIFORNIA CODE OF REGULATIONS
Division 2
Chapter 1
SubChapter 2
Sections 2510-2560

Directions:

Sign and complete this form and mail or fax it to CSTI, P.O. Box 8104, San Luis Obispo, CA 93403-

8104. Attn: Haz, Mat. Outreach Coordinator.

Fax: (805) 549-3555.

Acknowledgment Receipt:

I acknowledge having received and read a copy of the California Code of Regulations, Sections 2510 - 2560, and agree to conduct State certified hazardous materials training in accordance with said regulations.

Date:	Phone:()
	(Print or Type)
Certified Instruc	tor's Name:
Instructor Numb	өг:
Mailino Addross	·

State of California - OES/CSTI

Revised 11/2/93

Form HM 200

<u>California Specialized Training Institute</u> <u>Hazardous Materials Technician / Specialist</u>

TEACHING VERIFICATION FORM:

TECH / SPEC MODULE COUR	SE NUMBER
DATE:	
LOCATION:	
STATEMENT OF TEACHING VERIFIC	CATION:
As Course Manager for the above I verify that (name)	e indicated course,
(certified instructor number, if has competently assisted in the	
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to be considered for Instructor	certification for the
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Revised 11/2/93

State of California-DES/CSTI

Form HM220

2550 (a) (10)

California Specialized Training Institute Hazardous Materials Specialist Evaluation Record

Position	Comments Section
I.C.Staff Incident Commander Aide	Scenario # Date Proctor
Site Safety Officer Information Officer Liaison Officer Plans	Scenario # Date Proctor
Protective Actions Operations	Scenario # Date Proctor
Hez Mat Group Haz Mat Group Supervisor Haz Mat Safety Entry Leader Decon Leader	Scenario # Proctor
Hez Mat Tech/Ref Leader Site Access Control Leader Medical Unit Leader	Scenario # Proctor
Entry Team Entry team member	Scenario # Date Proctor
Decon Team Member Haz Mat Tech/Ref Team	Scenario # Date Proctor
Tech/Ref Team Member Scenario #	Scenario # Date Proctor
PERFORMANCE	Scenario # Date Proctor
3 = OUTSTANDING 2 = ABOVE AVERAGE 1 = AVERAGE 0 = FAILURE	Scenario # Date Proctor
Date Class *	Final Score Instructor
Last First	Student #

POSITION

ICS Command Staff

Incident Commander.

Demonstrate the ability to function as Incident Commander within the guidelines of Firescope ICS HM-120

Incident Commander Aide.

Demonstrate the ability to function as Incident Commander Aide within the guidelines of Firescope ICS HM-120.

Incident Safety Officer.

Demonstrate the ability to function as Incident Safety Officer within the guidelines of Firescope ICS HM-120. Coordinate the development and implementation of a site safety plan.

Information Officer.

Demonstrate the ability to function as information Officer within the guidelines of Firescope ICS HM-120. Develop an incident press release, establish a Press area, coordinate all information released from the incident.

Liaison Officer.

Demonstrate the ability to function as Liaison Officer within the guidelines of Firescope ICS HM-120. Act as the point of contact for all outside agencies

Planning Section Chief.

Demonstrate the ability to function as Planning Section Chief within the guidelines of Firescope ICS HM-120.

Protective Actions Group Supervisor.

Demonstrate the ability to function as Protective Actions Group Supervisor within the guidelines of Firescope ICS HM-120. Develop and supervise the implementation of protective actions utilizing information obtained from Tech/Ref.

Operations Section Chief.

Demonstrate the ability to function as Operations Section Chief within the guidelines of Pirescope ICS HM-120.

Hazardous Materials Group

HazMat Group Supervisor.

Demonstrate the ability to function as HazMat Group Supervisor within the guidelines of Firescope ICS HM-120. Be Responsible for the Implementation of the incident-action plan,

HazMat Safety,

Demonstrate the ability to function as HazMat Safety within the guidelines of Firescope ICS HM-120. Develop the Site-Safety Plan. Conduct Safety briefing.

Entry Leader,

Demonstrate the ability to function as Entry Leader within the guidelines of Firescope ICS HM-120. Demonstrate the ability to manage, plan and direct overall entry operations. Insure proper backup support, Recommend mitigation actions to be performed. Maintain control of all personnel and equipment within the Hot zone (Exclusion Zone).

1G-3

Decon Leader.

Demonstrate the ability to function as Decon Leader within the guidelines of Firescope ICS HM-120. Be responsible for decontamination of all personnel and equipment exiting the Hot Zone. Insure proper chain of custody for all samples and evidence in the Decon area.

HazMat Tech/Ref Leader.

Demonstrate the ability to function as HazMat Tech/Ref Leader within the guidelines of Pirescope ICS HM-120. Provide technical information and assistance to the HazMat Group Supervisor. Provide product information and mitigation recommendations through research, interpretation of monitoring data and chemical analysis of samples. Provide protective action recommendations. Determine appropriate chemical protective clothing for entry and Decon teams.

Site Access Control Leader.

Demonstrate the ability to function as Site Access Control Leader within the guidelines of Firescope ICS HM-120. Be responsible for the establishment of Contamination control zones and control the movement of all personnel between those zones.

Medical Unit Leader.

Demonstrate the ability to function as Medical Unit Leader within the guidelines of Firescope ICS HM-120. Insure the proper medical monitoring of all personnel prior to donning and after doffing chemical protective clothing and prior to any bottle change. Maintain records of the above. Advise the HazMat Safety officer of any worker exceeding established medical guidelines. Coordinate the treatment of all injuries within the incident control zones.

Entry team member.

Under the direction of the Entry Leader, safely perform the duties assigned within the Hot Zone. Insure the use of the buddy system. Select and use the proper tools and equipment for mitigation of the incident. Demonstrate the ability to operate and understand monitoring equipment. Properly don and doff chemical protective clothing. Perform rescue of injured personnel within the Hot Zone.

Decon team member.

Under the direction of the Decon Leader, safely perform the duties assigned within the Decontamination corridor. Insure the use of the buddy system. Select and use the proper tools and equipment for decontamination of all personnel samples and equipment exiting the Hot Zone. Properly don and doff chemical protective clothing.

Tech/Ref team member.

Under the direction of the Tech/Ref Leader, provide product information and mitigation recommendations through research, interpretation of monitoring data and chemical analysis of samples. Provide protective action recommendations. Determine appropriate chemical protective clothing for entry and Decon teams.

CALIFORNIA OFFICE OF EMERGENCY SERVICES **CALIFORNIA SPECIALIZED TRAINING INSTITUTE**

POST OFFICE BOX 8104 - SAN LUIS OBISPO, CA 83403

PHONES: EMERIMGMT; (805) 649-3536 NON-RESIDENT: (805) 649-3343 FEDERAL; (805) 549-3671 HAZ MAT: (805) 549-3344 FAX: (805) 548-3348 FAX: (805) 649-3555 FAX: (805) 649-3555

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Note

Authority cited: Section 8574.20(a), Government Code; Reference: Hazardous Substances Emergency Response Training, Title 2, Division 1, Chapter 7, Article 3.8, Section 8574.20(b)(c)(f)(g)(h), Government Code.

HISTORY

- 1. New section filed 7-8-91; operative 8-7-91 (Register 91, No. 46).
- 2. Amendment of section and forms filed 5-12-94; operative 6-13-94 (Register 94, No. 19).

§ 2560. Field Training Facility.

- (a) Minimum Requirements
- (1) A State Certified Hazardous Materials Field Training Facility (FTF) shall have all of the following training aids:
- (A) Drums that have been designed with leaks of the following types:
- (i) One Side Void (eg. fork lift or nail puncture);
- (ii) One Bottom Failure (bottom of drum cut free so that drum fails if moved);
- (iii) One Bung Leak (damaged threads); and
- (iv) One Chine Leak (1/16 holes or saw cut).
- (B) Drums for sampling:
- (i) One 17 E with threaded bung, 55 gal.;
- (ii) One 17 H with removable top, 55 gal.; and
- (iii) One non-operable (weld or braze bungs closed).
- (C) Overpack:
- (i) One DOT 49 CFR 173.3 Salvage Drum, 85 gal.;
- (ii) One DOT 49 CFR 173.3 Salvage Drum, 8 gal.; and
- (iii) One Dot 49 CFR 173.3 Salvage Drum, polyethylene.
- (D) One 100-150 lb. Chlorine Container designed for vapor leak from the valve area.
- (E) One 1-Ton Chlorine Container designed for liquid and vapor leaks from valve and fusible plug. Container shall be designed to allow instructor to change leak from a liquid to a vapor when students roll the container.
- (F) One Chlorine Tank Dome designed for liquid line, vapor line and safety relief valve leak. One leak should be from vibration opening of valve, one leak from a valve loose in

its mount, and one leak from a failed safety relief valve. The tank dome shall be designed to allow the student to read the vapor pressure via one of the vapor lines.

- (G) One Fixed Bulk Storage Tank (minimum of 200 gallon capacity) with leaks of a type to facilitate the application of a tank bandage.
- (H) One DOT class MC 306/MC 406 type Tank Truck designed to simulate leak from dome cover on overturned tanker. Tanker must be of sufficient size to allow drilling for stinger operations.
- (1) One Railroad Tankcar with domes listed below or domes listed below on a simulated Railroad Tankcar. All work shall be done on a platform that is no larger than 64 square feet and at least 10 feet above ground level:
- (i) One Chlorine Dome meeting requirements specified in Section 2560(a)(1)(F);
- (ii) One Pressure Dome designed to leak from liquid valve, vapor valve, and failed safety-relief valve. The dome shall be designed to allow students to gauge the liquid level in the tank; and,
- (iii) One General Service Dome designed to leak from liquid valve.
- (J) One Storm Drain designed to allow water flow from an outfall line for students to construct an underflow dam to contain hazardous materials.
- (K) One Piping System designed to leak liquid or vapor on 2-12-inch or larger pipes including the following:
- (i) Valve, Flange, Weld, and Thread Failures;
- (ii) Cracked Pipe; and,
- (iii) Sheared Pipe.
- (L) Pressure Vessels designed to leak from a valve or valve area including the following:
- (i) One 100-150 lb Container.
- (ii) One 1-Ton Container meeting the requirements specified in 2560(a)(1)(E); and,
- (iii) Two Pressurized Gas Cylinders (e.g., fumigants, acetylene, oxygen).
- (M) One Cargo Box Trailer or Intermodal Container to be used to simulate a traffic accident with mixed cargo involved.

(A) Drum-related:	
(i) Plug and Dike.	
(ii) Bung Wrench.	
(iii) Foam Wedges.	
(iv) Dye.	
(v) Epoxy Putty.	
(vi) Grounding and Bonding.	
(vii) New Bungs.	
(viii) Speed Wrench and Socket.	
(ix) Drum Repair Kit.	
(x) Drum Hand Truck.	
(xi) Transfer Pump.	
(xii) Redwood Plugs.	
(xiii) Drum Lifter.	
(B) Chlorine-related:	
(i) A Kit.	
(ii) B Kit.	
(iii) C Kit.	
(iv) Ammonia Atomizer Bottle.	
(C) Powdered Materials-related:	
(i) Shovels.	
(ii) Brooms.	

(2) A State Certified Hazardous Materials Field Training Facility (FTF) shall have adequate supplies of all of the following equipment:

(i) Hand Tools.
(ii) Valve Thread Cap.
(E) Fixed Storage Tank-related:
(i) Patching Kits.
(ii) Pneumatic Patching Equipment.
(iii) 5-Minute Marine Epoxy.
(F) Piping Leaks-related:
(i) Pneumatic Patching Equipment.
(ii) Patching Kits.
(iii) Flange Gaskets.
(iv) Bolts and Nuts.
(v) Hand Tools.
(G) Cargo Tank-related:
(i) Dome Clamp (MC 306/406).
(ii) Step Ladder.
(iii) Pneumatic Drill.
(iv) Grounding and Bonding Cables.
(I) Storm Drain-related:
(i) Shovels.
(ii) Sheet Plastic.

(iii) Plastic Bags.

(D) Pressurized Gas Cylinders-related:

(iv) Tarps.

(v) Over/Underflow Pipes (3-8 inches diameter).
(vi) Pneumatic Plugs.
(J) Absorbents (polar and non-polar type):
(i) Pads.
(ii) Booms.
(iii) Pillows.
(iv) Granular.
(K) Sampling-related:
(i) Colawasa Tube.
(ii) Scoops.
(iii) Pipettes.
(iv) Soil Sample Auger.
(v) Plastic ZipLoc-type Bags.
(vi) Drum Thief's
(vii) Spoons.
(viii) Bottles with Seals and Labels.
(ix) 1-gallon Paint Cans for Overpack.
(L) Monitoring-related:
(i) CGI.
(ii) Oxygen Meter.
(iii) Photoionization Detector.

(iii) Wheelbarrows.

(iv) Sand.

(iv) Dosimeters.
(v) Radiation Meters. Mr/hr and R/hr.
(vi) Colormetric Tubes.
(vii) Field Chemical ID Kit.
(viii) Test Papers.
(M) Decontamination-related:
(i) Four Containment Pools.
(ii) Four Water Wands.
(iii) Two Hudson Type Garden Sprayers.
(iv) Wash Tubs.
(v) Trash Bags (55-gallon type).
(vi) Four Garden Hoses or Equivalent.
(vii) Tarps.
(viii) Brush Assortment.
(ix) Sponges.
(x) Towels.
(N) Other:
(i) Windsock.
(3) A State Certified Hazardous Materials Field Training Facility (FTF) shall have all of the following reference materials:
(A) Chemical Dictionary (Hawley's).
(B) Guidelines for the Selection of Chemical Protective Clothing (ACGIH).
(C) Handbook Of Reactive Chemical Hazardous (L. Bretherick).

- (D) CHRIS Manual (U.S. Coast Guard).
- (E) Merck Index.
- (F) Dangerous Properties of Industrial Materials (SAX).
- (G) Farm Chemical Handbook (Meister).
- (H) Pocket Guide to Chemical Hazards (NIOSH).
- (I) Fire Protection Guide on Hazardous Materials (NFPA).
- (J) California Hazardous Materials Incident Contingency Plan (OES 1991).
- (4) A State Certified Hazardous Materials Field Training Facility (FTF) shall have all of the following protective clothing:
- (A) Level A Suits (adequate supply to assure that no suit is worn twice without first being cleaned and disinfected. Suit must provide total encapsulation.).
- (B) Level B Suits (one per student).
- (C) Level C Suits (one per student).
- (D) Chemical Resistant Boots (one pair per student).
- (E) Chemical Resistant Gloves (one pair per student).
- (F) Eye Protection (goggles and safety glasses, one pair per student).
- (G) Hearing Protection (one set per student).
- (H) Air Purifying Respirators (one per student).
- (I) Self-Contained Breathing Apparatus Mask (one per student).
- (J) Self-Contained Breathing Apparatus (one per every two students).
- (K) Flash Protection Over-Suit (one).
- (L) Cryogenic Over-Suit (one).
- (5) A State Certified Hazardous Materials Field Training Facility (FTF) shall have an adequate supply of all of the following forms:
- (A) ICS Form 201 -- Incident Briefing.

- (B) ICS Form 202 -- Incident Objectives.
- (C) ICS Form 205 -- Incident Radio Communications Plan.
- (D) ICS Form 214 -- Unit Log.
- (E) California State Hazardous Materials Incident Report Form (OES 1/91).
- (6) A State Certified Hazardous Materials Field Training Facility (FTF) shall have all of the following safety items:
- (A) First Aid Kit (EMT-1 type).
- (B) Emergency Telephone or Radio (to summon paramedic).
- (C) Covered Observation Area with sufficient capacity to seat entire class and able to provide protection from the rain and sun.
- (D) Flashlights (one per two students).
- (E) Emergency Night Lighting sufficient to illuminate entire exercise area.
- (7) All leaks generated at a State Certified Hazardous Materials Field Training Facility shall be designed to leak at the approximate gallons-per-minute (and pressure) that would be found in an actual incident.
- (b) Inspection and Certification Procedures.
- (1) Any FTF Coordinator seeking state certification for a FTF shall notify the California Specialized Training Institute Hazardous Materials Section Chief in writing, requesting an inspection.
- (2) Upon written request for FTF inspection from any FTF Coordinator, the California Specialized Training Institute Hazardous Materials Section Chief shall notify the Office of the State Fire Marshal Training Division to arrange for a joint inspection within 45 calendar days of receiving the FTF Coordinator's written request.
- (3) The FTF Coordinator requesting the inspection shall be notified, in writing, by the California Specialized Training Institute Hazardous Materials Section as to the date and time for the FTF inspection. The FTF Coordinator shall arrange for the proper personnel to be at the FTF to operate equipment and demonstrate that the training aids function as required during the inspection.
- (4) FTF inspections shall be conducted jointly by representatives from the California Specialized Training Institute Hazardous Materials Section and the Office of the State Fire Marshal Training Division.

- (5) Inspectors shall ensure that all the minimum required equipment and training aids, as defined in Section 2560(a), are present and fully operational. Inspectors shall complete a Field Training Facility Inspection Report (HM form 190), as referenced in Section 2550 and forward it to the California Specialized Training Institute Hazardous Materials Section Chief within 10 working days. Within 10 working days of receiving the inspection report, the California Specialized Training Institute Hazardous Materials Section Chief shall notify the FTF Coordinator, in writing, that the inspected FTF has been approved or denied certification. If the FTF is disapproved, the Section Chief shall forward a written report to the FTF Coordinator specifying the inspected FTF's deficiencies. Once the FTF Coordinator has corrected all of the identified deficiencies, the FTF Coordinator may request another inspection pursuant to this section.
- (6) A state certified FTF is required for Hazardous Materials Specialist (1F) and (1G) Courses as referenced in Section 2520(p) and (q).
- (7) Any State Certified FTF is subject to unannounced inspection/audits conducted by a faculty member of the California Specialized Training Institute Hazardous Materials Section and/or a designee of the Office of the State Fire Marshal. Unannounced FTF inspection/audits will be conducted in accordance with the procedures established in Section 2540(f).
- (8) If any changes occur in the FTF minimum requirements, as referenced in Section 2560(a), then the Chief of the California Specialized Training Institute Hazardous Materials Section is required to notify all FTF Coordinators in writing of said changes within 30 working days. FTF Coordinators shall have 90 working days to make all said changes. Upon completing changes, the FTF Coordinator will notify the Chief of the California Specialized Training Institute Hazardous Materials Section in writing within 30 working days. The Chief of the California Specialized Training Institute Hazardous Materials Section may, at his or her discretion, initiate an FTF inspection to verify compliance with said changes. All changes shall be completed prior to any state certified courses being conducted at the FTF.
- (9) Mobile FTFs are subject to all of the same procedures and requirements of a fixed site FTF. Mobile FTFs are required to have all items, as specified in Section 2560(a), at all locations where the Mobile FTF is being used.
- (10) The Course Manager shall ensure that the FTF have all training aids and equipment, as required in Section 2560(a), present and operational during the entire course in which the Course Manager is responsible.
- (c) Field Training Facility Coordinator
- (1) A Field Training Facility Coordinator is a State Certified Hazardous Materials Instructor, as referenced in Section 2530, that is responsible for managing and maintaining a Field Training Facility.

- (2) A Field Training Facility Coordinator is responsible for abiding by all procedures specified in Section 2560 and for completing and signing all administrative forms and correspondences pertaining to the FTF.
- (3) All Course Managers conducting training at a FTF shall have received prior permission from the Field Training Facility Coordinator. The FTF Coordinator can deny use of the FTF to a Course Manager, if in the FTF Coordinator's opinion, the FTF is inadequately supplied, maintained, or presents any unsafe training conditions.
- (4) The Course Managers conducting training at a FTF shall ensure that minimum required equipment, as referenced in Section 2560(a), is present at the FTF.

Note

Authority cited: Section 8574.20(a), Government Code. Reference: Hazardous Substances Emergency Response Training, Title 2, Division 1, Chapter 7, Article 3.8, Section 8574.20(e), Government Code.

HISTORY

1. New section filed 5-12-94; operative 6-13-94 (Register 94, No. 19)